

Beijing Haixin Energy Technology Co., Ltd.

2022 Annual Report



April 2023

2022 Annual Report

Section Important, catalogs and Interpretation

The company's board of directors, board of supervisors, and directors, supervisors, and senior managers guarantee that the contents of the annual report are true, accurate and complete, free from false records, misleading statements or major omissions, and assumes personal Other and joint and several legal responsibilities.

Zhang Pengcheng, the person in charge of the company, Sun Yanhong, the person in charge of accounting work, and the person in charge of the accounting department (accounting Person in charge) Li Jie declares that he guarantees the authenticity, accuracy and completeness of the financial report in this annual report.

All directors have attended the board meeting for reviewing this report.

Risk reminder of sharp decline in performance or loss:

☐ Applicable ☐ Not applicable

1. Specific reasons for performance loss

Compared with the same period of last year, the company's net profit attributable to the owners of the parent company in 2022 has increased Larger losses, mainly due to the large fluctuations in commodity prices caused by the macroeconomic environment and inefficient asset management caused by losses. In the second half of the year, the price of biodiesel has fallen sharply, and the profit margin has fallen sharply; The price of raw materials in the industry continues to run at a high level, and the increase in the sales price of coke is lower than the increase in the purchase price of raw materials. As a result, the cost of production enterprises is higher, and the loss range is obvious. Now trade according to the company's main products and raw materials Price changes, specifying the impact on the company's 2022 annual performance.

(1) Hydrocarbon-based biodiesel

During the reporting period, the company's hydrocarbon-based biodiesel achieved operating income of 1.468 billion yuan, a year-on-year increase

249.78%. The prices of hydrocarbon-based biodiesel raw materials and products generally rose in the first half of the year and continued to rise in the second half of the year.

The downward trend is basically consistent with the trend of international crude oil and diesel prices. According to Longzhong Information, Argus, etc.

Public data shows that international crude oil and diesel prices have continued to decline since June, and WTI crude oil prices from July to December

Prices fell 24%, Okeyport diesel prices fell 22%, and the largest drop in hydrocarbon-based biodiesel products was

22.6%, as of December 31, the decline was 17.62%. Sales of hydrocarbon-based biodiesel in the second half of the year compared with the first half

Increased by 9.87%, the demand of major customers increased slightly, but the price of products in the process of raw material procurement and processing

In the downward trend, the growth rate of operating revenue in the first half of the year was lower than the growth rate of operating costs in the first half of the year.

The annual gross profit margin dropped from 5.01% to -1.33%. The sharp price fluctuations caused the hydrocarbon-based biodiesel

The main reason for the sector's performance loss.

During the reporting period, the performance of the company's hydrocarbon-based biodiesel segment suffered a loss, but Shandong Sanju and the entrusted

The production capacity of manufacturing enterprises has steadily increased, the production situation has continued to improve, and no major adverse changes have occurred, which is in line with the industry trend.

Basically the same. The domestic biodiesel market is in its infancy, and the global biofuel market is still under supply.

Should be in short supply status. The company's products and production processes use waste oil as raw materials to produce renewable biofuels

materials, with strong market competitiveness. The demand in the European market is improving, and the European aviation field will be mandatory in 2025

Add 2% bio-jet fuel, the industry is in a stage of rapid development, and there is no overcapacity.

(2) Coal chemical products

During the reporting period, affected by the market pattern of "coal strong and coke weak", the coking industry has always been in the leading position in the industrial chain.

weak position. The average sales price of Meifang Coking's products in the second half of 2022 will drop by 20.94% compared with the first half of the year, while

The average price of raw materials fell by 15.09%, and the poor profitability of steel companies in the second half of the year further reduced the space for the coking industry.

The price gap with coking coal continues to narrow. Affected by this, the gross profit of coke products turned from positive to negative in the second half of the year. According to "my

"Steel Network" data shows that the annual profit of independent coke enterprises in Inner Mongolia is -59.45 yuan per ton of coke.

In the context of the loss of the entire industry of coke enterprises, Meifang Coking suffered a large loss during the reporting period, with a net profit loss of 274 million

Yuan.

According to national policy requirements, major coking provinces and cities have proposed to phase out coking plants below 4.3 meters in 2023.

coke ovens, but the new coking equipment was put into production and the production volume was increased, and the eliminated production capacity was not equal to the newly added production capacity, so the coking production capacity was still too high

left. During the reporting period, the US coking 5.5m² x960,000t/a tamping coke project was awarded by Wuhai City, Inner Mongolia

Daqu was included in the coking shutdown, elimination and exit list. At present, relevant matters have not been imposed on the US coking and its upstream and downstream enterprises.

The production and operation of the industry have been affected, and the US coking and its upstream and downstream enterprises are carrying out production and operation according to the established plan.

camp activities. However, the change in the application of policies in Wuda District, Wuhai City may have a negative impact on the US coking operation in the future.

significant impact, the company will, in accordance with the relevant provisions of the "Shenzhen Stock Exchange GEM Stock Listing Rules"

The announcement of progress shall be disclosed in a timely manner.

(3) During the reporting period, polymethoxy dimethyl ether (DMMn), the main product of Sichuan Xinda, has not yet formed

Stable supply capacity, the product market is in the cultivation stage, Sichuan Xinda lost 131 million yuan for the whole year. from line

From the perspective of industry development, DMMn has broad development prospects, but the domestic industry is still in its infancy.

Many companies have deployed DMMn industrialization construction projects. Due to the high technical difficulty, the industrialization projects have not yet taken shape.

into effective production capacity.

(4) Since 2020, the income of four ecological agriculture-related enterprises, including Sanju Green Energy, a subsidiary of the company, has declined.

Huge margin, consecutive losses. During the reporting period, the four companies mainly carried out accounts receivable collection, accounts payable

Handling and promoting equity transfer and other related work, the four companies suffered a total loss of 140 million yuan for the whole year.

(5) During the reporting period, the company lost 112 million yuan in equity investment.

2. Specific measures to improve profitability

1. Effectively improve production capacity

The company will focus on building a good ecology that is conducive to the creation of corporate value, and run through the concept of value creation

In the whole process of production and business decision-making, strengthen cost control, management innovation capabilities, and strengthen lean operations and

lean management. The bulk of biodiesel is becoming more and more obvious, and scale will become the core competitiveness of enterprises, effectively

reduce manufacturing cost. During the reporting period, the company's main biodiesel production enterprise, Shandong Sanju, compared with the scale and efficiency of the previous year.

The profitability that should be formed has initially appeared. In 2023, the raw material pretreatment device will be put into operation, and the adaptability of raw materials will be better.

Strong, and has the ability to digest the tail oil of the treatment unit, improve the raw material classification utilization system; raw material pretreatment

After the device is put into use, the processing volume per unit time will be improved, the production capacity will be further released, and the direct processing per ton will be reduced.

Labor cost, enhance the profit margin and market competitiveness of the company's biodiesel products.

2. Create an efficient purchasing and marketing system

The company will expand the variety and supply of biodiesel raw materials, expand domestic raw material sources, and increase raw material supply.

The strength should be guaranteed; establish a list of raw material suppliers, improve the transparency of raw material procurement, and control procurement costs.

The company will continue to promote the reform of the raw material procurement system implemented by American Coking, optimize product mix and coal blending body

relationship, and strengthen upstream and downstream and capital management.

The company will further improve the biodiesel overseas marketing system and give full play to the location advantages of the Singapore company.

potential, develop markets outside the EU, promote the optimization of customer structure and transaction models, and move up and down the industrial chain

Travel to expand customers and penetrate into end users. At the same time, refine the product structure and open up the by-product of low-condensation biodiesel

Overseas sales channels for bio-naphtha, and strive to maximize the profits of the biodiesel industry chain.

Give full play to the marketing advantages of Sanju Kite, continue to promote the introduction of external technologies and optimize production costs, and develop

Emerging markets such as alkane dehydrogenation and precious metal catalysts, increase the promotion of gas purification services, and increase the number of warehouses

Clearance of deposits and accounts receivable.

The company will conduct in-depth research on the correlation between biodiesel raw materials and products, ICE diesel and palm oil,

Improve the ability to study and judge the market conditions of bulk commodities, improve the hedging plan, and use bulk commodities when conditions are ripe

The commodity financial market avoids the risk of falling prices in the spot market.

3. Optimize asset quality and efficiency

Continue to promote the transfer of 20% of Sanju Yujin's 20% equity interests in four ecological agriculture-related enterprises including Sanju Green Energy

Let the work, optimize the asset structure and focus on the core business; promote Sichuan Xinda minority shareholders to complete the performance as soon as possible

Compensation commitments can effectively improve Sichuan Xinda's operational capabilities, enhance corporate value, and reduce losses;

The product structure of JuKate injects new kinetic energy into the development of catalytic purification business; promotes the development of Suzhou Hengsheng and Wuhan Gold

Transformation and optimization of mid-term business to improve asset efficiency.

Any content in this report that involves future plans, performance forecasts, etc., does not constitute the

The company's commitment to any investors and related parties, investors and related parties should maintain sufficient

Risk awareness and should understand the difference between plans, forecasts and commitments.

The company invites investors to read the full text of this annual report carefully.

"Discussion and Analysis" in the "XI. Prospects for the Company's Future Development" section describes in detail the company's operations

Investors are advised to pay attention to the relevant content and pay attention to investment risks.

The company's profit distribution plan reviewed and approved by the board of directors is: based on 2,349,720,302

0 yuan (tax included) for every 10 shares distributed to all shareholders, 0 bonus shares (tax included), and

0 shares are transferred from the capital reserve to all shareholders for every 10 shares.

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1. Signed by Mr. Zhang Pengcheng, the person in charge of the company, Ms. Sun Yanhong, the person in charge of accounting work, and Mr. Li Jie, the person in charge of the accounting department (accounting supervisor)

Financial statements in the name and seal of the company.

2. The original audit report with the seal of the accounting firm and the signature and seal of the certified public accountant.

3. The originals of all company documents and announcements publicly disclosed on the website designated by the China Securities Regulatory Commission during the reporting period.

4. Other relevant materials.

V. The place where the above documents for reference are prepared: the office of the board of directors of the company.

paraphrase

paraphrase	refer to	Interpretation content
Company, our company, Haixinneng	refer to	Beijing Haixin Energy Technology Co., Ltd.
Controlling shareholder, Haixinzhi	refer to	Beijing Haixinzhi Low Carbon Technology Development Co., Ltd. Beijing Haidian
Haixian District State-owned Assets Supervision and Administration Commission	refer to	District People's Government State-owned Assets Supervision and Administration Commission Beijing Haidian District
Sea State Investment Group	refer to	State-owned Assets Investment Group Co., Ltd. Beijing Haidian District State-owned Assets
Hai Guotou	refer to	Investment and Operation Co., Ltd. Shandong Sanju Bioenergy Co., Ltd.
Shandong Sanju	refer to	
Tripoly energy Tripoly	refer to	Beijing Sanju Energy Co., Ltd. Shenyang Sanju Kate
Kate	refer to	Catalyst Co., Ltd.
Tripoly green energy	refer to	Beijing Sanju Green Energy Technology Co., Ltd.
Daqing Sanju	refer to	Daqing Sanju Energy Purification Co., Ltd.
Sanju Family View	refer to	Inner Mongolia Sanju Jiajing New Energy Co., Ltd. Wuhan Jinzhong Engineering
Wuhan Jinzhong	refer to	Technology Co., Ltd. (formerly Wuhan Jinzhong Petrochemical Engineering Co., Ltd.) Beijing Huashi United Energy Technology Development Co.,
Beijing Huashi	refer to	Ltd.
Sanju Lv yuan	refer to	Beijing Sanju Green Source Co., Ltd.
Nanjing Sanju	refer to	Nanjing Sanju Biomass New Material Technology Co., Ltd.
Sichuan Xinda	refer to	Sichuan Xinda New Energy Technology Co., Ltd.
Sanju Hong Kong	refer to	Sanju Environmental Protection (Hong Kong) Co., Ltd.
Suzhou Hengsheng	refer to	Suzhou Hengsheng New Material Co., Ltd.
Jutal Hebi	refer to	Jutal Offshore Oil Service Co., Ltd. Hebi Huashi United Energy
Huashi	refer to	Technology Co., Ltd.
American coking	refer to	Inner Mongolia Meifang Coal Coking Co., Ltd.
Jushi Energy	refer to	Inner Mongolia Jushi Energy Co., Ltd.
Bozhou Sanju Green House	refer to	Bozhou Sanju Lvhui Biomass New Material Co., Ltd. Pingluo County Sanju Lv yuan Biomass New
Pingluo Sanju Lv yuan	refer to	Material Co., Ltd.
Fuxin Sanju Lv yuan	refer to	Fuxin Sanju Lv yuan Biomass New Material Co., Ltd.
Sanju Yujin	refer to	Beijing Sanju Yujin Technology Development Co., Ltd.
Trimeric America	refer to	SJ ENVIRONMENTAL CORP
Singapore company	refer to	HAIXIN ENERGY TECHNOLOGY INTERNATIONAL PTE.LTD.
Four ecological agriculture related enterprises	refer to	Beijing Sanju Green Energy Technology Co., Ltd., Beijing Sanju Green Source Co., Ltd., Nanjing Sanju Biomass New Material Technology Co., Ltd., Heilongjiang Sanju Beidahuang Biomass New Material Co., Ltd. Daqing Yucuo Shengmao Agricultural Technology Co., Ltd.
Daqing Jade Straw	refer to	
North Exchange	refer to	Beijing Equity Exchange
China Securities Regulatory Commission	refer to	China Securities Regulatory Commission

Section 2 Company Profile and Main Financial Indicators

1. Company information

stock abbreviation	Hai Xinneng Branch	stock code	300072
Chinese name of the company	Beijing Haixin Energy Technology Co., Ltd.		
Chinese abbreviation of the company	Hai Xinneng Branch		
The foreign name of the company (if any)	Beijing Haixin Energy Technology Co., Ltd.		
Abbreviation of the company's foreign name (if any)	Haixin Energy-Tech		
The legal representative of the company	Zhang Pengcheng		
Registered address	Floor 9, Daxing Jiye Building, Building 1, No. 33 Renda North Road, Haidian District, Beijing		
Postcode of registered address	100080		
Historical change of company registered address	None		
office address	Floors 9, 10, 11, and 12 of Daxing Jiye Building, Building 1, No. 33, Renda North Road, Haidian District, Beijing		
Postal code of business address	100080		
Company Internet address	www.sanju.cn		
email	investor@sanju.cn		

2. Contact person and contact information

	Board Secretary	Securities Affairs Representative
Name	Zhang	Zhang
contact address	Rui 12th Floor, Daxing Jiye Building, Building 1, No. 33, Renda North Road, Haidian District, Beijing	Guanqing 12th Floor, Daxing Jiye Building, Building 1, No. 33 Renda North Road, Haidian District, Beijing
Telephone	010-82685562	010-82685562
Fax	010-82684108	010-82684108
email	investor@sanju.cn	investor@sanju.cn

3. Information disclosure and preparation location

Stock exchange websites where companies disclose annual reports	Shenzhen Stock Exchange (http://www.szse.cn/) "China Securities
The name and website of the media where the company discloses the annual report	Journal", "Shanghai Securities News", "Securities Times", "Securities Daily", Juchao Information Network (http://www.cninfo.com.cn) Office of the Company's Board of
Where to prepare the company's annual report	Directors

4. Other relevant information

Accounting firm hired by the company

Accounting firm name	Reanda Certified Public Accountants (Special General Partnership)
Accounting firm office address	Floor 12, Building E, Ocean International Phase II, No. 210, Ciyun Temple Beili, Chaoyang District, Beijing

Name of Signing Accountant	Liu Ge, Wang Xingjie
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Sponsor institutions engaged by the company to perform continuous supervision duties during the reporting period

ŸApplicableŸNot applicable

The financial consultant engaged by the company to perform continuous supervision duties during the reporting period

ŸApplicableŸNot applicable

V. Main accounting data and financial indicators

Whether the company needs to retrospectively adjust or restate the previous year's accounting data

ŸYes ŸNo

Retrospective adjustment or restatement of reasons

Changes in accounting policies

	2022	2021		Increase/decrease this year compared to last year	2020	
		before fixing	adjusted		before fixing	adjusted
Operating income (yuan)	8,648,353,14 7.31	5,750,649,46 2.56	5,754,901,86 3.00	50.28%	7,133,442,29 8.65	7,133,442,29 8.65
Net profit attributable to shareholders of listed companies (yuan)	804,432,945.23	82,911,732.28	81,400,156.54	-1,088.24%	1,380,160,472.90	1,380,160,472.90
Net profit attributable to shareholders of listed companies after deducting non-recurring gains and losses (yuan)	840,565,162.10	5,724,062.69 4,212,486.95		-20,054.13%	1,402,308,562.04	1,402,308,562.04
Net cash flow from operating activities (yuan)	510,590,483.17	1,024,302,950.14	1,024,302,950.14	-149.85%	926,110,670.91	926,110,670.91
Basic earnings per share (yuan/share)	-0.3424	0.0353	0.0346	-1,089.60%	-0.5874	-0.5874
Diluted earnings per share (yuan/share)	-0.3424	0.0353	0.0346	-1,089.60%	-0.5874	-0.5874
Weighted Average Return on Equity	-10.66%	1.02%	1.00%	-11.66%	-15.53%	-15.53%
	end of 2022	end of 2021		Increase/decrease at the end of the year compared with the end of the previous year	end of 2020	
		before fixing	adjusted		before fixing	adjusted
Total assets (yuan)	15,275,685,275.22	14,769,888,368.94	14,767,140,49.41	3.44%	18,889,296,831.40	18,889,296,831.40
Net assets attributable to shareholders of listed companies (yuan)	7,027,242,981.16	8,148,725,909.65	8,147,214,333.91	-13.75%	8,125,679,361.75	8,125,679,361.75

The reasons for the change of accounting policies and the correction of accounting errors

The company implements the "Notice on Printing and Distributing the "Interpretation of Accounting Standards for Business Enterprises No. 15"" (Cai Kuai [2021] No. 35) on the 2021 annual financial report.

The data is adjusted and adjusted synchronously corresponding to the main accounting data and financial indicators. For details of the impact on consolidated financial statements and consolidated income statement data, please refer to Section 10.5.44.

Significant accounting policies and changes in accounting estimates.

The company's net profit before and after deducting non-recurring gains and losses in the last three fiscal years, whichever is lower, is negative, and the audit report of the latest year shows that the company's ability to continue operating is uncertain.

Yes No

The lower of the net profit before and after deducting extraordinary gains and losses is a negative value

Yes No

project	2022	2021	Remark
Operating income (yuan)	8,648,353,147.31	5,754,901,863.00 -	
Deduction amount of operating income (yuan)	30,223,347.46	10,704,510.01 -	
Amount after deduction of operating income (yuan)	8,618,129,799.85	5,744,197,352.99 -	

6. Main financial indicators by quarter

unit: yuan

	the first season	second quarter	the third quarter	fourth quarter
operating income	1,975,535,505.72	2,830,184,999.40	1,823,484,880.69	2,019,147,761.50
Net profit attributable to shareholders of listed companies	-176,353,637.73	28,191,901.30	-123,834,553.47	-532,436,655.33
Net profit attributable to shareholders of listed companies after deduction of non-recurring gains and losses	-193,307,227.36	24,889,615.71	-130,757,899.05	-541,389,651.40
Net cash flow from operating activities	-109,513,635.69	-193,047,557.81	-341,505,849.27	133,476,559.60

Whether the above-mentioned financial indicators or their sums are significantly different from the financial indicators disclosed by the company in quarterly reports and semi-annual reports

Yes No

7. Differences in accounting data under domestic and foreign accounting standards

1. Differences in net profit and net assets in financial reports disclosed in accordance with both international accounting standards and Chinese accounting standards

Applicable Not applicable

During the reporting period of the company, there was no difference in net profit and net assets in the financial report disclosed in accordance with the International Accounting Standards and the Chinese Accounting Standards.

2. Differences in net profit and net assets in financial reports disclosed in accordance with foreign accounting standards and Chinese accounting standards

Applicable Not applicable

During the reporting period of the company, there was no difference in net profit and net assets in the financial report disclosed in accordance with foreign accounting standards and in accordance with Chinese accounting standards.

8. Non-recurring profit and loss items and amounts

Applicable Not applicable

unit: yuan

project	2022 amount	2021 amount	2020 Amount	illustrate
Gains and losses on disposal of non-current assets (including the written-off portion of assets impairment provision)	12,763,811.49	1,724,187.20	393,069.42	Mainly the gains and losses from the disposal of fixed assets and intangible assets.

Government subsidies included in the current profit and loss (except for government subsidies that are closely related to the company's normal business operations, comply with national policies and regulations, and are continuously enjoyed in accordance with certain standards or quantities)	10,261,989.41	17,580,944.38	32,479,125.58	It is mainly the government subsidies received in the current period that are directly included in the current profit and loss and the government subsidies that are carried forward through deferred income and included in the current profit and loss.
Fund occupancy fees charged to non-financial enterprises included in current profit and loss	14,951,035.17	11,264,478.56		Mainly interest income received from non-financial corporations.
Debt restructuring profit and loss	5,402,533.90	2,344,420.00		Primarily debt forgiveness proceeds.
Other non-operating income and expenses other than those listed above	-3,313,608.80	-5,247,127.67	3,236,765.17	It is mainly the net non-operating income and expenses of the company.
Other profit and loss items that meet the definition of non-recurring profit and loss		62,925,661.68		
Less: Amount affected by income	3,071,307.43	4,696,509.61	2,700,091.90	
tax Amount affected by minority interests (after tax)	862,236.87	8,708,384.95	11,260,779.13	
total	36,132,216.87	77,187,669.59	22,148,089.14	

Specific circumstances of other profit and loss items that meet the definition of non-recurring profit and loss:

ŸApplicableŸNot applicable

The company does not have other specific circumstances of profit and loss items that meet the definition of non-recurring profit and loss.

Explanation on the definition of non-recurring profit and loss items listed in the "Interpretive Announcement No. 1 on Information Disclosure of Companies Offering Securities to the Public - Non-recurring Profit and Loss" as recurring profit and loss items

ŸApplicableŸNot applicable

The company does not define the non-recurring profit and loss items listed in the "Explanatory Announcement No. 1 on Information Disclosure of Companies Offering Securities to the Public - Non-recurring Profit and Loss" as recurring profit and loss items.

Section III Management Discussion and Analysis

1. Industry situation of the company during the reporting period

The company needs to comply with the disclosure requirements for "business related to the chemical industry" in the "Guidelines for Self-Regulatory Supervision of Listed Companies of Shenzhen Stock Exchange No. 3 - Industry Information Disclosure"

In 2022, the macro economy will be significantly affected by multiple unexpected factors at home and abroad, such as geopolitical conflicts and the Fed's interest rate hike.

The scope of easing is limited, and the domestic macro economy is in a situation of shock recovery. The company's main business is bioenergy, new coal chemical industry, catalytic purification business, and bulk commodity market

They are closely related and are greatly affected by the international and domestic macroeconomic environment.

(1) Bioenergy business

During the reporting period, the company's bioenergy business was mainly engaged in the production and sales of hydrocarbon-based biodiesel (HVO). Hydrocarbon-based biodiesel (HVO) is produced by converting animal and vegetable oils

The chemical composition of the bio-based diesel produced by hydrodeoxygenation of fat is close to that of existing diesel, which can replace fossil-based diesel and is called second-generation biodiesel.

Bioenergy has great potential in carbon reduction, and it is the unwavering direction for European and American countries to advance. During the reporting period, the war between Russia and Ukraine, policy adjustments in Southeast Asia, and demand in Europe

Under the influence of events such as reduction of demand, biodiesel feedstock and demand market fluctuated violently, and enterprises encountered certain challenges in short-term operation; but from a long-term perspective, renewable energy

The Amendment to the Source Directive (RED II) clearly proposes that by 2030 the proportion of renewable fuels in the transportation industry will reach 29%, which is higher than the 26% proposed in 2021.

Expecting good demand in the future, North American and domestic markets are expected to open, and the gradual stabilization of raw material POME and UCO supply chains will ensure the release of the potential of the biodiesel market. In addition, SAF is in

Under the promotion of foreign policies, the scale of the pilot project will be further expanded, and the new track of biodiesel application is expected to be fully opened. ReFuelEU voted by the European Parliament in July 2022

The proposal clearly mentioned that by 2025, the proportion of SAF in aviation fuel needs to reach 2%, and in 2040 and 2050, it needs to reach 37% and 85% respectively, corresponding to the demand potential of bio-jet fuel exceeding 43 million tons/ Year. As a derivative product of second-generation biodiesel, bio-jet fuel is a key way to reduce aviation carbon emissions, and the policy has increased

Hope to promote the rapid development of the industry.

As a key carbon reduction path in the diesel industry, the State Council's "Carbon Peak Action Plan Before 2030" clearly stated that "vigorously promote advanced bio-liquid fuels and other alternatives

The "14th Five-Year Plan for Bioeconomy" and the "14th Five-Year Plan for Renewable Energy Development" issued in 2022 also clearly propose to actively promote advanced

Promote the substitution and application of biofuels in key areas such as municipal transportation, establish biomass combustion blending standards, actively carry out pilot projects for the promotion of biodiesel, and promote the transformation of fossil energy to green and low-carbon renewable energy; the 2023 government work report reiterated that "focus on controlling fossil fuels Energy consumption", the domestic market of biodiesel has great potential.

The domestic application of hydrocarbon-based biodiesel is in its infancy. The company is the listed company with the largest production capacity of hydrocarbon-based biodiesel in China. It produces high

Condensation HVO and low-condensation HVO, synergistic use of suspended bed, fixed bed, expanded bed multiple processes to realize the graded utilization of different waste oil raw materials.

(2) New coal chemical industry

The main products of this business are coke and coke oven gas. The coke business is in the middle reaches of the "coal-coke-steel" industrial chain. According to the data of "My Steel Network", in 2022, it is estimated that 28.04 million tons of coking capacity will be eliminated, 53.28 million tons will be added, and a net increase of 25.24 million tons. Inner Mongolia is expected to phase out 15.3 million tons by 2023, and the

The proposed production capacity is 35.8 million tons, a net increase of 20.5 million tons. According to national policy requirements, major coking provinces and cities have proposed to phase out coke ovens below 4.3 meters in 2023,

However, the rapid growth of new production capacity has resulted in excess coking production capacity.

According to my steel network statistics, from 2013 to the first half of 2021, the price difference between the comprehensive index of steel prices and the comprehensive index of coke prices remains stable as a whole.

Beginning in August 2021, the deviation between the steel composite index and the coke price index will narrow, and even invert. Before the range, the coke industry has limited room for profit improvement. Coking capacity

Concentrate on leading enterprises, some provinces and cities clearly require to limit new coking production capacity, and the backward production capacity indicators after elimination will be integrated through the industry, and "small coking" will become "big coking"

In the future, the competition in the coking industry will become more intense, and the supply of raw materials, processing costs, and transportation distance will all become the winning factors. Large coke ovens, CDQ,

Configurations such as top-mounted coke will become the mainstream.

During the reporting period, the company's subsidiary Meifang Coking Co., Ltd.'s tamping coke project was included in the list of coking shut down and eliminated by Wuda District, Wuhai City, Inner Mongolia.

Since the letter from the government, we have continued to communicate and negotiate with the territorial government. On March 14, 2023, American Coking received the "About Accelerating the Elimination and Shutdown of Coking Enterprises" issued by Wuda District

"Reminder Letter", requiring the formulation and reporting of a specific shutdown and exit plan, but as of the date of approval of this report, whether the US coking tamping coke project is applicable to the "1 million

The coking project below 1/a" has not yet been clarified about the conditions for shutting down and eliminating exits, exit plans, relevant policies, capacity replacement, compensation arrangements and other supporting measures.

At the same time, the company has asked the original shareholders to pay attention to the progress of the government's handling of the US coking project, and has made preparations for fulfilling the repurchase commitment in accordance with the equity transfer agreement.

prepare.

(3) Catalytic purification business

The petrochemical and coal chemical industries are the main markets for catalysts and purifiers. The petrochemical industry is an important pillar industry of the national economy, including oil refining and chemical industry

In the two fields, primary chemicals can be further synthesized into a variety of organic chemical raw materials and synthetic materials, with large industrial scale and long chain. In the petrochemical production process, for

To facilitate the refining and decomposition processes, catalysts are essential. New petrochemical projects mainly focus on refining and chemical integration transformation and upgrading, light hydrocarbon comprehensive utilization projects, covering naphtha

Oil-to-olefins, catalytic cracking to olefins, crude oil direct cracking to olefins, propane dehydrogenation to propylene (PDH) and other technologies. Application of Catalyst Purifier in Traditional Coal Chemical Industry

It mainly includes BDO, PVC, synthetic ammonia, etc. The modern coal chemical industry includes coal to oil, coal to natural gas, coal (methanol) to olefins, coal (synthesis gas) to ethylene glycol

wait.

Catalyst production technology is relatively high, and there are few production enterprises. The domestic refinery catalyst technology is almost completely controlled by Sinopec and PetroChina. With the development of the industry and

Market competition, catalyst products are constantly enriched and perfected, and the cycle of technological upgrading is getting shorter and shorter, among which production enterprises are gradually emerging. Pay more attention to the environment in the production of dosage forms

In particular, higher requirements are put forward for the treatment of ammonia nitrogen wastewater. In terms of process technology, new carriers and molding technologies have become one of the key factors for differentiated competition. Produce

In terms of product types, precious metal catalysts have great potential in the fields of catalytic reforming, coal-to-ethylene glycol, alkane dehydrogenation and mercury-free catalysts. Ruthenium-based catalysts have emerged in the fields of ammonia synthesis and hydrogen energy

utilization. Exhaust gas treatment catalysts and molecular sieve special carriers have broad prospects for domestic substitution of imports under the current double-carbon background.

Purifiers have different technical requirements in different application fields. In terms of natural gas desulfurization, improving the sulfur capacity and recovery rate of desulfurizers has become an increasingly important issue in high-sulfur days in my country.

Effective measures for desulfurization of natural gas wells, small-scale integration of devices, skid-mounted installations, and continuous and stable technical services have become the main demands of the market.

Sanju Kite, a subsidiary of the company, is a member unit of the "Three Agents" cooperation network of PetroChina and Sinopec. It is a first-class production supplier of PetroChina and Sinopec.

Channel advantages and market influence, with long-term and stable R&D resources, industrial scale-up capabilities of dosage forms, and strong marketing capabilities. Sanju America's main business is stone

Oil and natural gas desulfurization services, including complete equipment leasing, sales of desulfurizers and technical consulting, saw steady business growth.

2. The main business of the company during the reporting period

The company needs to comply with the disclosure requirements for "business related to the chemical industry" in the "Guidelines for Self-Regulatory Supervision of Listed Companies of Shenzhen Stock Exchange No. 3 - Industry Information Disclosure"

Adhering to the concept of "perfecting the value of all things", the company responds to the country's industrial ideas of optimizing energy structure, improving the ecological environment, and developing circular economy. Relying on self-developed core technologies and

products, the company constantly stimulates the enthusiasm and creativity of the talent team and promotes the rapid development of biodiesel business. development, and maintain the steady development of businesses such as energy catalytic purification, new coal chemical

industry, and specialty chemical industry. By optimizing and integrating low-efficiency assets, the company focuses on the strategic direction of biodiesel, and gradually establishes core operating assets with high technical barriers and resource advantages.

(1) The main business of the company

1. Production and sales of biodiesel

This business is the main direction of the company's industrial development, covering the company's bio-energy industry technology development, bio-raw material procurement and product sales system, bio-energy projects and external commissioned processing and

production systems. The company adopts the self-developed suspended bed process and improved fixed bed process to produce high-quality hydrocarbon-based biodiesel (HVO) from gutter oil, palmitized oil, rancid oil and other waste oils as raw materials. Hydrodeoxygenation of

oil or animal fat (including various waste oils such as waste oil) is used to produce hydrocarbon-based biodiesel (HVO), which contains almost no oxygen. The main component is alkanes, and its chemical composition, molecular structure, and calorific value are close to fossil

Diesel components can be blended or even completely replaced with fossil-based diesel in large proportions without changing or modifying the engine. Biodiesel has excellent quality (sulfur content is less than 1ppm, polycyclic aromatic hydrocarbon content is less than 1%, cetane

number is greater than 80), compared with fossil-based diesel, it can reduce net carbon dioxide emissions by 80%, and is low-carbon, clean and environmentally friendly The advantages.

2. Production and sales of environmentally friendly materials

This business is the production and sales of functional chemicals such as catalysts and purifiers, including four series of desulfurization purifiers, desulfurization catalysts, other purifiers (dechlorination agents, dearsenic agents), special catalyst materials and catalysts,

and more than 100 varieties It is mainly used in the production process or product cleaning of energy and chemical industries such as coal chemical industry, petrochemical industry and natural gas chemical industry. Sanju Kate, a wholly-owned subsidiary, is responsible for the R&D,

production and sales of the above-mentioned energy purification products, and provides complete sets of purification processes, equipment and complete services for energy and chemical enterprises, and provides overall technologies such as industrial transformation, raw material

transformation, comprehensive utilization of exhaust gas, and environmental protection. Solution design, implementation and comprehensive operation and other services. Sanju America, a wholly-owned subsidiary, is mainly engaged in dry and wet desulfurization technical services,

desulfurization equipment leasing and sales of desulfurization agents in the U.S. oil and gas field market.

The company has established a close cooperative relationship with well-known domestic institutes such as the Academy of Stone Sciences and excellent foreign purification technology companies such as Evonik. The main products such as desulfurizers and hydrogenation catalysts have a high reputation and market share in the industry. It is a member of No.1 Network and Materials and Equipment Network, a member unit of Sinopec's "Three Agents" cooperation network, and a first-level production supplier of PetroChina and Sinopec.

3. Production and sales of new coal chemical products

The main products of this business are coke and coke oven gas. The holding subsidiary Meifang Coking is a coal coking enterprise, producing coke, coke particles, coke powder, tar, sulfur, crude benzene, ammonium sulfate, coke oven gas, etc. As the core enterprise of the company to promote coke, chemical production, coke oven gas recovery and utilization of methanation to LNG, hydrogen-rich co-production of synthetic ammonia, the company has realized the regional scale effect and synergy effect of the company's business in Wuhai-Alxa and surrounding areas.

4. Production and sales of specialty chemical products

The main products of this business are styrene, neopentyl glycol, LNG, liquid ammonia, etc., which are produced and sold by Daqing Sanju, a holding subsidiary, and Sanju Jiajing, a wholly-owned subsidiary. Styrene is the most used derivative of benzene, mainly used in the production of polystyrene resin, acrylonitrile-butadiene-styrene terpolymer, styrene-acrylonitrile copolymer resin, ion exchange resin, unsaturated polyester And styrene-based thermoplastic elastomers, etc. In addition, it can also be used in pharmaceutical, fuel, pesticide and mineral processing industries. Neopentyl glycol is widely used in the fields of automobiles, textiles, medicine, coatings, pesticides, plastics and petroleum, and its derivatives can be used as spices, drugs, flame retardants, aviation lubricants, plasticizers, inks and insulating materials, etc. It is currently mainly used in the manufacture of oil-free alkyd trees, especially unsaturated polyester powder coatings. The main business of Sanju Jiajing, a wholly-owned subsidiary, is to comprehensively utilize the by-product coke oven gas of the American coking plant to produce LNG and liquid ammonia, and at the same time produce part of ammonia water according to the demand of the American coking plant.

(2) Main business model

The company has established a relatively complete management system for procurement, production, and sales in various business fields such as biodiesel, new coal chemical industry, energy purification, and specialty chemical products.

1. Biodiesel business

The company established a bioenergy business department to comprehensively manage the procurement, production and sales of the second-generation biodiesel business.

(1) Procurement mode

The main raw materials of the company's second-generation biodiesel (HVO) are waste oils such as waste oil, palmitic acid oil (POME), and rancid oil. Bioenergy Division Raw Materials The Purchasing Department is co-operated with Sanju Hong Kong and Haixin International, and is responsible for the procurement of bio-energy raw materials. The company's procurement plan is market-oriented, guided by various plan management, in accordance with the principles of full research, bidding comparison, high quality and low price, focusing on centralized procurement, supplemented by retail purchases, and continuously strengthening supplier management and inventory logistics management, quality management, certification management and capital management, enhance supply stability and price advantages, and reduce procurement costs and risks.

(2) Production mode

The company adopts the principle of production and fixed sales, combined with market demand and sales plan, giving full play to its own production capacity and the characteristics of commissioned processing cooperative enterprises, and rationally adjusts production and production of high-condensation, high-condensation, Low-condensation product structure.

For self-built production capacity, Shandong Sanju maintains continuous production. While ensuring normal production and reasonable inventory, it continues to promote organizational management, equipment management, production management, technical management and on-site management, strengthens personnel health, safety and environmental protection management, and introduces external experts. Guide improvement, carry out internal selection and promotion, major inspection of post responsibility system, etc., and continue to carry out work of quality improvement, cost reduction and efficiency increase in the way of benchmarking.

For entrusted processing enterprises, the company usually provides raw materials, and the two parties agree on the yield, processing fee, delivery date and quality requirements, and the entrusted processing enterprise organizes the production by itself, and delivers the goods on time with guaranteed quality and quantity. The company has established a complete supplier screening and evaluation system to supervise its occupational health, production safety, environmental protection, quality control, etc., closely track manufacturing and material consumption during the production process, and ensure order execution.

(3) Sales model

The current main consumption areas of second-generation biodiesel are developed countries such as Europe and the United States, and the domestic market is still in the cultivation stage. The company uses Sanju Hong Kong and Haixin International as platforms to carry out international trade and sales of products through the Internet, telephone and on-site visits, and all products are exported.

The company adopts the direct sales method, and the bioenergy business department or Shandong Sanju signs sales or entrusted processing contracts with customers according to the specific business cooperation form. The company's main customers are large international energy suppliers and bulk product traders, and all products are exported to the EU in the form of general trade and processing with supplied materials. In order to expand the international market, we are further strengthening the business sales team, developing authorized local agents, increasing the proportion of direct-to-end customers, and enhancing brand influence.

Based on market demand, the company refers to the price trend of crude oil and diesel oil, as well as the European spot and forward delivery prices of the second-generation biodiesel in the same period. On the basis of raw materials and production costs, the company increases the appropriate profit as the sales benchmark price, and conducts according to the specific requirements of customers. After business negotiation, finalize the transaction price. The main factors affecting prices are raw materials, carbon emission trading prices in the European market, local government subsidy policies, product carbon emission reduction values (GHG values), sea freight fluctuations, and seasonal adjustments. When the price of raw materials changes significantly or the external economic situation changes significantly, the company will adjust the pricing.

2. New coal chemical industry

Meifang Coking, a subsidiary of the company, is a coal coking enterprise, producing and selling coke, coke pellets, coke powder, tar, sulfur, crude benzene, ammonium sulfate, coke oven gas wait.

(1) Procurement mode

American Coking is responsible for the market research and procurement of raw materials, and the raw materials purchased are mainly coal. The procurement plan is market-oriented, basically on-demand procurement, and the raw material procurement plan is formulated according to the product production plan. Procurement methods include bidding procurement, bidding direct procurement, inquiry procurement and long-term cooperative procurement, etc. Meifang Coking has established a relatively strict supplier evaluation system, and multiple departments participate in supplier evaluation; at the same time, it has formulated strict procurement control procedures to regulate procurement behavior, ensure the quality of raw materials and timeliness of supply, and reduce procurement costs and procurement risks.

(2) Production mode

Meifang Coking uses coal as raw material to produce different grades of coke and coke oven gas through coal blending, tamping, coking, coke quenching and various separation, purification and recovery processes. And tar, crude benzene, ammonium sulfate and other chemical products, according to the market coal and coke price fluctuations, rationally arrange the production load.

(3) Sales model

The products of Meifang Coking are mainly metallurgical coke. The main markets are steel and other metal smelting, calcium carbide production and other fields. The customer areas are concentrated in Hebei, Inner Mongolia and other places, mainly large state-owned and private iron and steel enterprises; chemical products are mainly sold in the surrounding area. After years of development, Meifang Coking has established a relatively complete sales system, which arranges sales according to customer procurement needs, covering market development, customer maintenance, product pricing, order and payment collection management, etc., and various systems and processes operate efficiently.

Coke and its series of products are bulk chemical products, mainly based on market pricing. The particularity of the coking industry determines that its bargaining power in the upstream and downstream is relatively weak. It is necessary to focus on pricing and bargaining based on the demand of downstream steel mills, while the sales of chemical products are more flexible. In recent years, the demand has been strong, and spot sales will be carried out according to the principle of the highest price.

3. Environmental protection materials (catalytic purification new materials)

Since its establishment, the company has carried out more than 20 years of continuous focused research on catalytic purification material technology. The key business areas include iron-based purification materials, ruthenium-based catalytic materials, and new carbon-based materials. Large-scale production, product sales, recycling and other complete industrial chains; at the same time, the company has a mature desulfurization service business.

(1) Procurement mode

There are many types of raw materials for catalyst purifier business products, mainly various precious metals, metal salts, carrier auxiliary materials, etc., and the prices of individual products such as precious metals fluctuate greatly. The company's procurement is market-oriented, tracking the price trend of key raw materials all year round, and constantly improving the supplier storage and selection mechanism. The Purchasing Department formulates a procurement plan based on the product demand put forward by the production department, sends out an inquiry demand, and signs a supply contract after comparing offers from qualified suppliers to ensure product supply and procurement costs. Some raw materials must be kept in safe stock.

The desulfurization service business has added equipment procurement and technical services on the basis of desulfurizers, and the equipment procurement is compared and recruited by the company according to the design documents. The winning bidder shall manufacture and supply the goods in accordance with the contract.

(2) Production mode

Catalyst purification agent business mainly adopts the business model of "production based on sales". The needs of downstream customers have the characteristics of multi-variety and customization, and reasonable arrangements need to be made between different production processes and different raw materials. The orders signed by the product sales department are reviewed and counted and fed back to the production department; the production department arranges the production plan according to customer needs, equipment capacity and material organization, organizes and coordinates various specific activities and resources in the production process, and completes the production plan.

The desulfurization service business involves project construction or equipment leasing, as well as agent replacement, operation and maintenance, technical services, etc.

According to the operation status of the equipment, corresponding resources are organized in a timely manner.

(3) Sales model

Catalyst purification agent business is centered on Sanju Kate, mainly direct sales, and the main markets are petrochemical and coal chemical industries. The company has established a complete sales operation system, covering demand mining, order negotiation, delivery organization, payment tracking, after-sales service, customer maintenance, etc., to meet market demand to the greatest extent and continue to create value for customers. While safeguarding the traditional business, the company actively develops new projects and upgrades of old equipment, and continues to promote the launch of new products on the market.

In terms of desulfurization service business, the company has established professional teams or companies in Xinjiang, Southwest China and the United States, and has formed a mature model of customer development, project construction, equipment leasing, agent replacement and operation and maintenance. The desulfurization service business model is mainly divided into two categories: one is desulfurization service charges based on desulfurization agents, and the business covers agent production, agent transportation, on-site loading and unloading agents, desulfurization project operation management and waste agent treatment. The second is desulfurization equipment leasing charges, the business covers desulfurization equipment design, manufacture, equipment safety management, etc.

Catalyst purification agent business and desulfurization service business are based on the concept of win-win development with customers, highlighting the market-oriented role, based on cost, combined with market research prices that meet current market conditions and are feasible as standard prices, and specific transaction prices are based on "Standard price + premium" pricing, the premium part mainly comes from the company's additional value-added services and special needs of customers.

4. Specialty chemicals and others

The main products of this business are styrene, neopentyl glycol, LNG and liquid ammonia, etc. The holding subsidiary Daqing Sanju and the wholly-owned subsidiary Sanju Jiajing are responsible for organizing the procurement, production and sales.

(1) Procurement mode

The main raw material of tripolystyrene in Daqing is crude cracked C8C9, the main raw material of neopentyl glycol is isobutyraldehyde; the main raw material of tripolystyrene is the by-product of coking enterprises coke oven gas. Production enterprises purchase nearby according to their needs, and the procurement methods are inquiry procurement, bidding procurement, etc., and the purchase price refers to the local market price.

(2) Production mode

Daqing Sanju adopts the production model of "production based on sales". According to the customer's sales order situation and the specific indicators required by the customer, formulate the production plan and organize the production. Produce. Daqing trimeric neopentyl glycol products have a certain reputation in the industry, and will reserve a certain amount of safety stock according to the supply of upstream raw materials.

Sanju Jiajing is a typical coke oven tail gas comprehensive utilization enterprise. It produces LNG through coke oven tail gas purification and methanation, and co-produces synthetic ammonia with rich hydrogen. The production load is dynamically adjusted according to the coke oven tail gas supply of upstream coking enterprises.

(3) Sales model

•Sales system

The downstream customers of Daqing tripolyneopentyl glycol are located in East China and South China, and the customers of styrene are mainly concentrated in Shandong and other places. The downstream industrial chain is relatively mature and the demand is relatively stable. Sanjujiajing LNG is mainly used for energy and fuel, liquid ammonia is mainly used for chemical raw materials, and LNG and liquid ammonia are mainly sold in surrounding areas. The above-mentioned companies have established a relatively complete sales system, covering market development, customer maintenance, product pricing, order and payment collection management, etc., and various systems and processes are running efficiently.

•Sales method

Daqing Sanju is a direct sales model. The company signs sales contracts with customers who have reached a deal intention, and the goods are delivered to collect the payment. The downstream customers of Sanju Jiajing are mainly when Major gas stations in the region, and has self-built gas stations to carry out retail business.

•Sales pricing

Styrene is a bulk chemical product, and the sales price refers to the market price. Neopentyl glycol is priced with reference to market prices in Shandong and East China. Some long-term customers give Certain price concessions. The competition of LNG and liquid ammonia in the surrounding market is relatively orderly, and the pricing is basically based on the different qualities of the products.

(3) Main performance driving factors

Carbon emission reduction, biodiesel and jet fuel addition policies are the main driving factors for the development of the biodiesel industry. From the perspective of industry characteristics, raw material procurement, production capacity, and sales channels are the core competitive elements of second-generation biodiesel companies. The company has established a bioenergy division to coordinate the procurement, supply and marketing system of biodiesel to enhance synergies. During the reporting period, Shandong Sanju completed a series of technological transformation and upgrading, steam and other supporting utilities were completed and put into operation in sequence, achieving stable and long-term operation, and significantly improving the processing capacity of the plant.

Cost control, coal blending management, and price trends are the core driving factors for the performance of the coking industry. During the reporting period, Meifang Coking completed the production and sales targets as planned, but the overall raw materials and products fluctuated at a high level, and the net profit suffered a large loss. The macroeconomic environment and environmental protection policies have greatly disturbed the coke market, the demand in the downstream steelmaking industry is weak, and the supply of upstream coal mines is affected by factors such as environmental protection and production capacity integration. This has led to the emergence of a market pattern of "weak coke and strong coal". The bargaining power of coke enterprises among them is limited, and the profit margin is squeezed. During the reporting period, the price of LNG, a downstream product of coking, was higher than the average level of last year and remained at a relatively high level. Sanjujiajing performed well. In response to the problems encountered by the company, the company has strengthened the management of technology, procurement, marketing, etc., controlled costs, expanded coal sources and new customers, introduced Huawei Cloud coal blending system to help strengthen coal blending management, and developed new products such as high-ash primary coke and other measures to improve enterprise efficiency.

The development of reagents, industrial scale-up, and market development capabilities are the core driving factors for the performance of the catalytic purification industry. During the reporting period, affected by the macro-environment, domestic downstream customers postponed agent replacement, and product sales and shipments were once stagnant, which had a greater impact on production and supply. The oil and gas market involved in Sanju America has rapidly resumed growth, the demand for desulfurization has been boosted, and both revenue and net profit have increased.

Procurement Mode of Main Raw Materials

unit: yuan

main raw material	Procurement model	Purchases as a percentage of total purchases	Has there been a major change in the settlement method?	Average price in the first half of the year	Average price in the second half of the year
Second-generation biodiesel raw	Compare quality and price	14.05% no		9,074.81	7,790.76
materials Other waste animal	Compare quality and price	1.98% no		8,033.88	7,404.52
and vegetable oils Clean coal Coke oven gas		53.39% No 1.17%		2,262.33	1,898.85
exclusive purchase Active zinc oxide Ammonium		No 0.40% No		0.30	0.48
molybdate Molybdenum trioxide Basic zinc		0.32% No 0.05%		22,378.78	22,666.00
carbonate Pseudoboehmite Quality and price		No 0.07% No		170,720.00	180,193.45
comparison Activated alumina ball quality		0.11% No 0.08%		208,115.38	218,000.00
comparison and price comparison Isobutyraldehyde		No 1.97% No		16,540.00	16,680.90
frame purchase industrial pyrolysis carbon nine		4.77% No		5,332.96	5,228.33
frame purchase				8,818.66	8,800.00
				7,751.20	5,813.45
				4,888.22	5,355.57

Reasons for major changes in raw material prices compared with the previous reporting period

Second-generation biodiesel raw materials: The company's second-generation biodiesel raw materials are waste animal and vegetable oils, which are divided into imported raw materials and domestic raw materials according to sources. Of which imported raw materials

The main source is Southeast Asia. Starting from the end of 2021, factors such as persistently high crude oil prices and the successive release of new biodiesel production capacity have stimulated the continuous increase in raw material prices.

continue to rise rapidly. In April 2022, the Indonesian government issued an export ban on palm oil and its derivatives, which further pushed up the price of raw materials sharply.

The prices of biodiesel products and raw materials hit record highs. Since then, the prices of biodiesel products and raw materials have continued to fall, and remained low and volatile in the fourth quarter. comprehensive

For the whole year, the company's actual purchase price in 2022 will increase by 38.91% compared with 2021;

The average purchase price in 2022 will increase by 28.87% compared with 2021.



Coal chemical raw materials: The raw material for the company's coking business is clean coal, which is mainly purchased from surrounding areas, Shanxi, Shaanxi, Xinjiang and other places, and a small amount of clean coal imported from Mongolia is purchased from ports. The purchase mode is the inquiry price. The market of "coal strength and coke weakness" will run through the whole year of 2022. In the process of continuous game between supply and demand, the price of coking coal will be slower than the ups and downs in 2021, but the average market price will increase compared with 2021. The company will make reasonable arrangements according to market trends purchase. The average purchase price of clean coal for the whole year of 2022 will increase by 17.13% compared with 2021.

The raw material used in the production of Sanju Jiajing is coke oven gas, which is mainly supplied by the US coking pipeline. The price in the first half of 2022 will be the same as that in 2021.

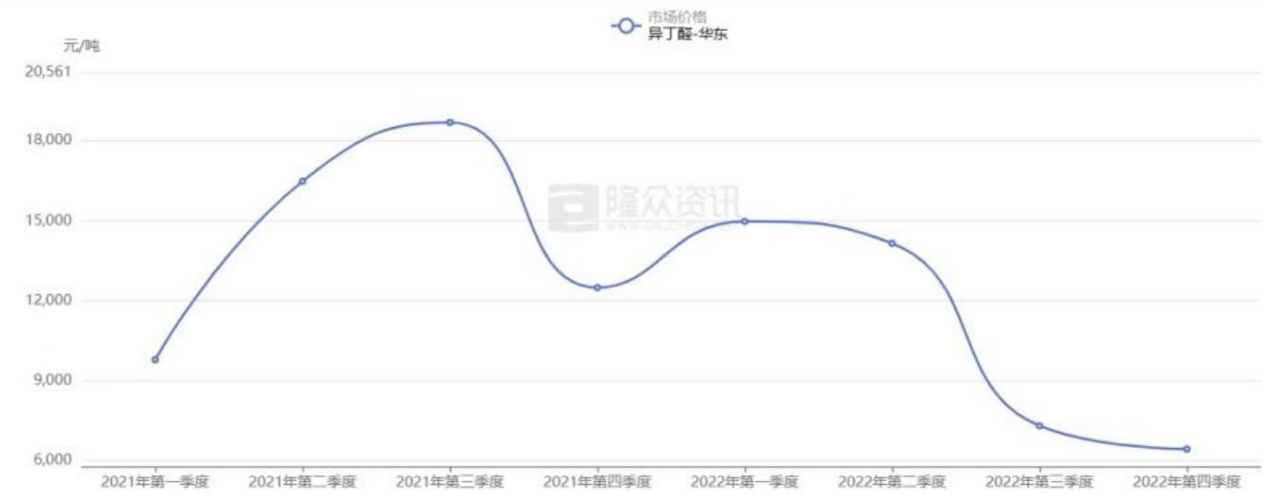
The annual average purchase price will increase by 26.67% compared to 2021.

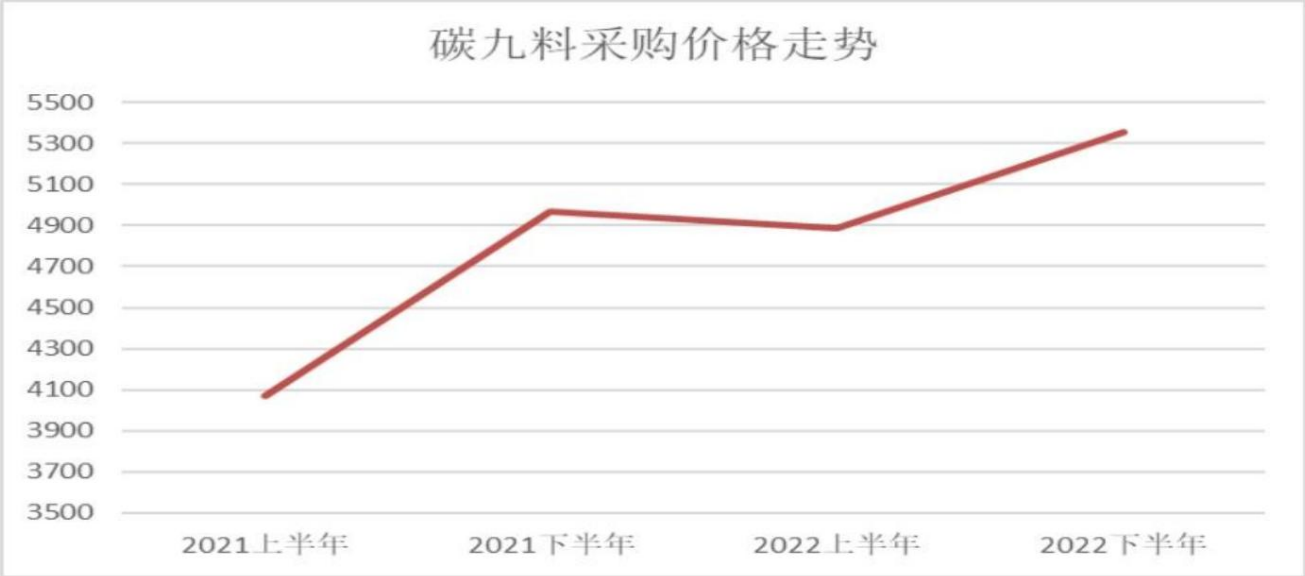
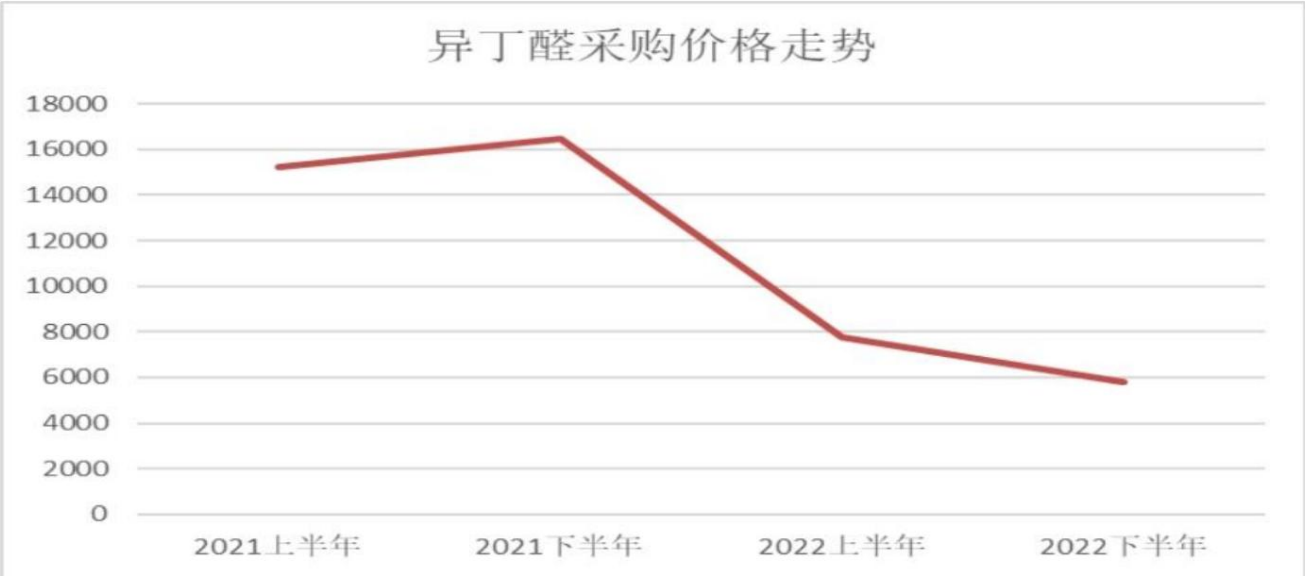
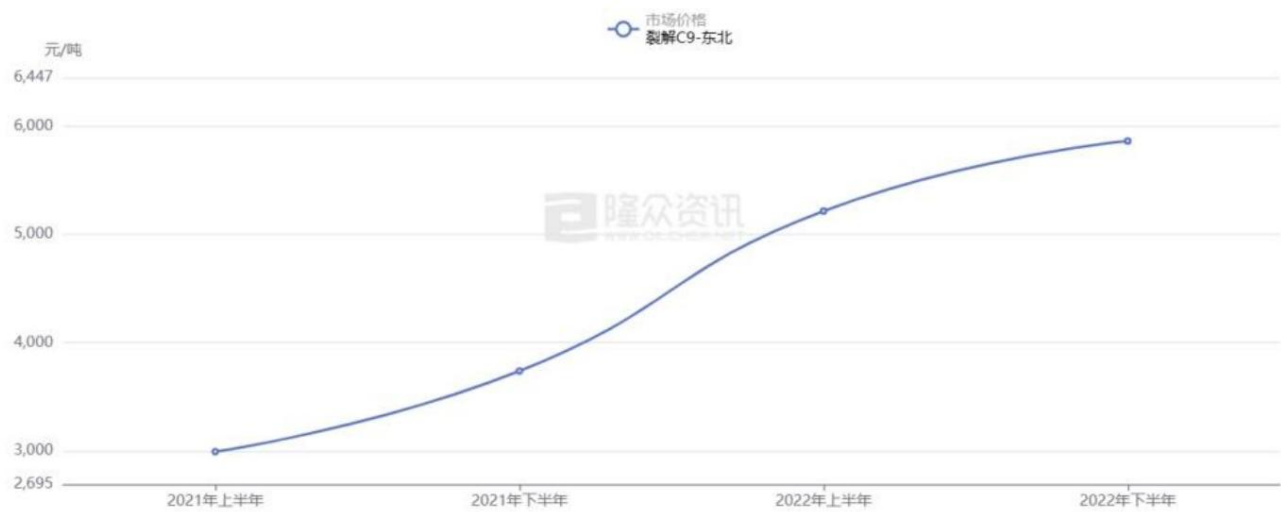


综合炼焦煤指数年指数			
时间	本年	上年	与上年比
2022	2319.53	1989.40	16.59%
2021	1989.40	1086.10	83.17%

Non-ferrous metal chemical raw materials: various metal compounds are the main raw materials for the production of catalysts and purifiers of the company. Affected by factors such as high energy prices, strengthening of the US dollar, and rising demand in global aerospace, shipbuilding, and new energy industries, the market prices of metals and other bulk commodities fluctuate. Larger, the production cost of non-ferrous metals has increased, and prices have continued to rise. The prices of molybdenum trioxide and ammonium tetramolybdate rose by 25.33% and 33.19% respectively; the prices of activated zinc oxide and basic zinc carbonate rose by 22.63% and 3.82% respectively; the prices of pseudoboehmite and activated alumina balls rose by 29.91% and 33.19% respectively 5.89%.

Other chemical raw materials: In the first half of 2022, the market price of isobutyraldehyde will basically continue in 2021. However, due to multiple factors such as the slowdown of domestic economic recovery and the decline in exports, the price of isobutyraldehyde began to fall sharply in June. It fell by 26.44%, and it is still fluctuating at a low level. The market price of cracked carbon nine for industrial use has increased by more than 96% compared with last year, mainly due to the high price of crude oil. The procurement advantages of the framework agreement are obvious. The company's purchase price of isobutyraldehyde in 2022 will drop by 24.45% compared with 2021, and the price of crude cracked carbon nine for styrene raw material industry will rise by 45.26% year-on-year.





The purchase price of energy accounted for more than 30% of the total production cost

ApplicableNot applicable

Reasons for significant changes in major energy types

none

Production technology of main products

main products	The stage of production technology and the situation of core technicians	Advantages of patent technology	product research and development
Second-generation biodiesel products (liquid paraffin/HVO)	Mature	Li Lin, Li Chuntao, etc.	have applied for biodiesel-related domestic leading: 3 patents for catalyst technology, 58 patents related to suspended bed technology, reactor technology, and original technology for material pretreatment technology, etc. Li Jingbin and Shan Hongfei have
Chemical Fertilizer Catalyst Mature Special Catalyst		authorized 9 patents Domestic leading foreign cooperation and independent research and development of Dan	
Mature		Hongfei	none
hydrogenation catalyst	Mature		18 patents have been authorized leading domestically
Cleaning agent (desulfurization agent, dechlorination agent, arsenic	Mature	Chi Ying, Shan Hongfei	Has more than 100 authorized patents 13
removal agent)	mature	Wang Dongliang, Chen Guang	authorized patents 14 domestic leading patents 14 domestic
Neopentyl glycol styrene	mature	Wang Dongliang, Chen Guang	leading 21 patents (2 invention patents, 19 utility models)
Coke	Mature	Cai Zhaotian, Ma Hongjie, Zhong Wen	
LNG	mature	Qiu Jinping and He Mingqian have authorized 20 patents. Qiu Jinping and He Minggan have no	domestic leading
liquid ammonia	mature	position.	

Production capacity of main products

main products	Design capacity	Capacity utilization	Capacity under construction	Investment and construction
Second-generation biodiesel products (liquid paraffin/HVO)	400,000 tons/year	32.31% None		conditions Subsidiary Shandong Sanju Bioenergy Co., Ltd. completed the construction and commissioning of self-built boilers, demineralized water, acid water stripping and sewage treatment devices in the first half of 2022, with a total investment of about 95 million yuan. The optimization of raw material pretreatment will start in September 2022. It has been completed in February 2023 and is currently being debugged. The estimated investment is about
Coke	2x960,000 tons/year	91.63% None 57.37%		35
LNG	140,000 tons/year liquid	None 18.97% None		
ammonia 100,000 tons/year chemical fertilizer	catalyst 1,800 tons/year	80.52% None 32.91%		
special catalyst 1,000 tons/year hydrogenation	catalyst 5,000 tons/	None 21.99% None		
year purification agent (desulfurizer, dechlorination agent, arsenic				
removal agent) Neopentyl glycol, styrene 50,000 tons/year				million yuan. no no no no no
	12500 tons/year	28.98% None		none
		96.00% None		none

Product types in major chemical parks

Major chemical parks	Product Type
Shenyang Economic and Technological Development Zone	Desulfurization purification agent, desulfurization catalyst, special catalyst and other purification products
Chemical Park Daqing High-tech Zone	polypropylene, lubricating oil, additives, etc.
Xinghua Park Inner Mongolia Alxa High-tech Industrial Development	LNG, liquid ammonia
Zone Longfeng Town Industrial Concentration Zone, Jiangyou	high-tech products energy new materials and products (formaldehyde, DMMn) liquid paraffin,
City, Sichuan Ju County Haiyou Chemical Park	asphalt, fuel oil

Wuda Park, Economic Development Zone, Wuhan City	Coal chemical industry (coal coking), chlor-alkali chemical industry, special metallurgy, fine chemical industry
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EIA approvals being applied for or newly obtained during the reporting period

ÿ Applicable ÿ Not applicable

serial number	Administrative license name	get time	Validity period	Approval Department
1	Shandong Sanju Bioenergy Co., Ltd.: safety production license Shandong Sanju	2022.03.14	2022.03.14 to 2025.03.13	Rizhao Municipal Administrative Examination and Approval Service Bureau
2	Bioenergy Co., Ltd.: supporting public works environmental impact assessment procedures Shandong	2022.12.15	/	Ju County Administrative Examination and Approval Bureau
3	Sanju Bioenergy Co., Ltd.: safety production standardization third- level certificate Shandong Sanju Bioenergy	Completed (unpublished)		Rizhao City Emergency Management Bureau
4	Co., Ltd.: Reply to the Environmental Impact Report of Raw Oil Pretreatment Project Reply on the Environmental Impact Report Form	The Administrative Examination and Approval Bureau is about to approve		Ju County Administrative Examination and Approval Bureau
5	of Inner Mongolia Sanju Jiajing New Energy Co., Ltd. 5000m³h Air Separation Nitrogen Production Project Inner Mongolia Sanju Jiajing New Energy Co., Ltd.: Safety	2022.03.17	/	Alashan High-tech Industrial Development Zone Administrative Approval and Government Service Bureau
6	Production License Inner Mongolia Sanju Jiajing New Energy Co., Ltd.: National Industrial Product Production	2022.06.22	2022.06.22 to 2024.09.05 2022.07.17 to	Emergency Management Department of Inner Mongolia Autonomous Region
7	License Inner Mongolia Sanju Jiajing New Energy Co., Ltd.: 5,000 m3 Air Separation Nitrogen Project Construction	2022.07.07	2027.07.06	Quality and Technical Supervision Bureau of Inner Mongolia Autonomous Region
8	Engineering Planning License Inner Mongolia Sanju Jiajing New Energy Co., Ltd.: Ammonia Recovery Project Construction Project planning permit	2022.07.25	/	Alashan High-tech Industrial Development Zone Administrative Approval and Government Service Bureau
9		2022.07.25	/	Alashan High-tech Industrial Development Zone Administrative Approval and Government Service Bureau

During the reporting period, the listed company had abnormal suspension of production

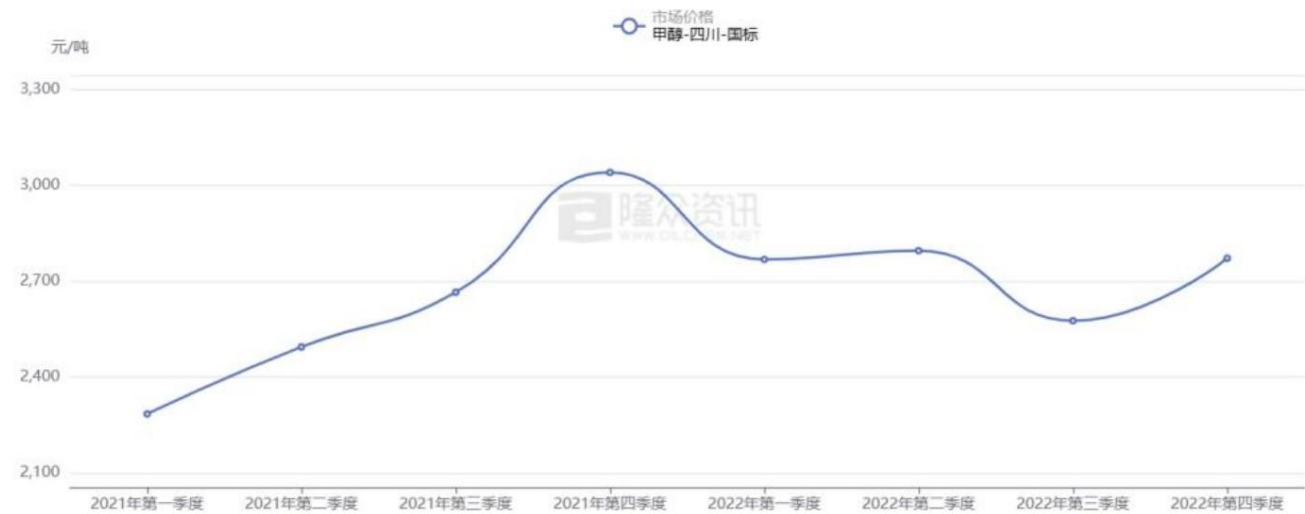
ÿ Applicable ÿ Not applicable

Due to the high price of raw material methanol in Sichuan Xinda, the annual average price in 2022 will increase by about 3.8% compared with that in 2021, while the demand in the downstream market will decrease.

The price continued to decline, and it began to fall sharply in June without any signs of correction, and the market conditions for driving were not met.

Sichuan Xinda will complete technological transformation in 2021. During the reporting period, Sichuan Xinda's operating income was 20 million yuan, accounting for 0.03% of the company's operating income, and its net profit was a loss

131 million yuan, accounting for 13.18% of the company's net profit.





The company is organizing Sichuan Xinda to optimize the process route, adjust the source of raw materials and product mix, increase the development of product application functions, and strive to do its best when market conditions permit.

Quickly resume work, and at the same time demonstrate the plan for external cooperation to reconstruct the industrial chain.

Relevant approvals, licenses, qualifications and validity periods

y Applicable y Not applicable

Trio Kate gets time				
serial number	Name of Administrative		Validity period	Approval Department
1	Licensing Reply on Environmental Impact Report of Construction Project of Shenyang Sanju Kate Catalyst Co., Ltd. Reply on	2006.11.02	/	Shenyang Environmental Protection Bureau
2	Environmental Impact Report of Phase II Construction Project of Shenyang Sanju Kate Catalyst Co., Ltd. Reply to the environmental impact report of the R&D and pilot scale-up base	2009.07.09	/	Shenyang Environmental Protection Bureau
3	construction project Reply to the environmental impact report of Shenyang Sanju Kate Catalyst Co., Ltd. chemical fertilizer catalyst and its supporting production facilities renovation	2016.03.14	/	Economic and Technological Development Zone Branch of Shenyang Environmental Protection Bureau
4	project	2012.05.21	/	Shenyang Environmental Protection Bureau
5	Registration certificate of units using hazardous chemicals 2017.07.17		2017.07.17 to 2023.07.16	Shenyang Economic and Technological Development Zone Emergency Management
6	Record certificate for units using highly toxic chemicals 2017.07.17		2017.07.17 to 2023.07.16	Bureau Shenyang Economic and Technological Development Zone Emergency
7	allow dirty	2020.06.29	2020.06.29 to 2025.06.28	Management Bureau Shenyang Economic and Technological Development Zone Ecological Environment Branch
Daqing Sanju gets				
serial number	Name of administrative	time	Validity period	Approval Department
1	license Letter of environmental protection acceptance opinion on the completion of a 30,000-ton/year styrene extraction	2014.08.15	/	Daqing Environmental Protection Bureau
2	unit Letter of environmental protection acceptance opinion on the completion of a 20,000-ton/year neopentyl glycol unit	2014.08.15	/	Daqing Environmental Protection Bureau
3	project Safety production license	2020.09.21	2020.09.21 to 2023.09.20 Heilongjiang Provincial Emergency Management Department 2020.11.12 to	
4	National industrial product production license allow	2020.11.12	2025.05.06 Heilongjiang Provincial Market Supervision Administration 2020.06.19 to 2023.06.18 Daqing High-	
5	dirty	2020.06.19	tech Industrial Development Zone should	

				Emergency Management and Ecological Environment Bureau
Sanju Family				
serial number	Name of Administrative	Scene Gets Time	Validity period	Approval Department
1	Permit Approval of Environmental Impact Report for Inner Mongolia Sanju Jiajing New Energy Co., Ltd. Comprehensive Utilization of Coke Oven Gas Construction Project with an Annual Output of 140,000 Tons of Liquefied Natural	2014.04.28	/	Environmental Protection Department of Inner Mongolia Autonomous Region
2	Gas About Inner Mongolia Sanju Jiajing New Energy Co., Ltd. Approval of the safety production license for the environmental impact report of the comprehensive utilization of LNG tail gas to produce 100,000	2016.04.26	/	Alxa League Environmental Protection Bureau
3	tons/year of synthetic ammonia project	2022.06.22	2022.06.22 to 2024.09.05 Inner Mongolia Autonomous Region	Emergency Management Department Inner Mongolia
4	National industrial production permit	2022.07.07	2022.07.17 to 2027.07.06	Autonomous Region Quality and Technical Supervision Bureau
5	Reply on Inner Mongolia Sanju Jiajing New Energy Co., Ltd. 5000m³h Air Separation Nitrogen Project Environmental Impact Report Form Energy Co., Ltd.: Ammonia	2022.03.17	/	Alashan High-tech Industrial Development Zone Administrative Approval and Government Service Bureau
6	Recovery Project Construction Engineering Planning Permit	2022.7.25	/	Alashan High-tech Industrial Development Zone Administrative Examination and Government Service Bureau
7		2022.7.25	/	Alxa High-tech Industrial Development Zone Administrative Examination and Government Service Bureau
8	allow dirty	2020.09.18	2020.09.18 to 2023.09.17	Inner Mongolia Autonomous Region Alxa League Ecological Environment Bureau
Sichuan Xinda				
serial number	Name of administrative	gets time	Validity period	Approval Department
1	license About Sichuan Xinda New Energy Technology Co., Ltd. Xinda New Energy Materials Industrialization Project (Phase I) 50,000 tons/year polyoxymethylene dimethyl ether project environmental impact report Approval of safety production license	2017.01.09	/	Sichuan Provincial Department of Environmental Protection
2	National industrial product	2020.07.24	2020.07.24 to 2023.07.23 Sichuan Provincial Emergency Management Department 2020.10.09 to	
3	production Permit Sewage Discharge Permit	2020.10.09 2020.09.06	2025.10.08 Sichuan Provincial Market Supervision Administration 2020.09.06 to 2023.09.05 Mianyang	
4		Shandong Sanju No.	Ecological Environment Bureau	
Acquisition Time 1				
400,000 tons/year Bioenergy Environmental Impact Report Approval	2020.12.30 Pollution Discharge Permit Hazardous		Validity period	Approval
Chemicals Registration Certificate			/	department Rizhao Municipal Administrative
2		2021.04.25	Examination and Approval Service Bureau 2021.4.25 to	2026.4.24 Rizhao Municipal Administrative Approval
3		2021.07.08	Service Bureau 2021.7.8 to 2024.7.7 Chemical Registration Center of Emergency Management Department	
American coking				
1	"Notice on the filing of the 240,000-ton stamped coke project with an annual output of 96 tons in September 2007 in the U.S. Circular Economy Industrial Park" Nei Fa Gai Gong Ri Zi [2007] No. 2014 Mongolia American Investment Co.,	About Inner	long	Inner Mongolia Autonomous Region Development and Reform Commission
2	Ltd. 190,000 tons of tamped coke and 200,000 tons of methanol project filing notice "Nei Fa Gai Gong Zi [2008] No. 1750" Inner Mongolia Autonomous Region Environmental Protection Department on Inner Mongolia Meifang Coal Coking Co., Ltd.'s annual output of 2*960,000 tons of		long	Inner Mongolia Autonomous Region Development and Reform Commission
3	tamping November 29, 2013 Reply to the Approval of the Environmental Impact Report of the Changjiao Project's Environmental Impact Report, Neihuan Shen [2013] No. 226		long	Environmental Protection Department of Inner Mongolia Autonomous Region
4	safety production license	March 24, 2020 June 30, 2020	3 years	Emergency Management Department of Inner Mongolia Autonomous Region
5	Industrial product production license		5 years	Market Supervision Administration of Inner Mongolia Autonomous Region

As of the date of approval of this report, American Coking has obtained the "Safe Production License" issued by the Emergency Management Department of Inner Mongolia Autonomous Region, which is valid until March 22, 2026. The qualification licenses of several other subsidiaries that are about to expire in 2023 are also being prepared for review and renewal in accordance with relevant procedures.

Engaged in petroleum processing and petroleum trading industry

Yes/No

Engaged in the fertilizer industry

YesNo

Engaged in the pesticide industry

YesNo

Engaged in chlor-alkali and soda ash industry

YesNo

3. Core Competitiveness Analysis

The company closely focuses on optimizing the energy structure and developing the circular economy industry, insists on scientific and technological innovation as the core development force, and has established a complete scientific and technological innovation system, and develop technologies, processes, equipment and products with independent intellectual property rights.

The company is a national high-tech enterprise, Beijing Enterprise Technology Center, Zhongguancun High-tech Enterprise, Beijing Intellectual Property Demonstration Unit, National Intellectual Property Power advantage enterprise, technological innovation demonstration unit of Petrochemical Federation, "Green Development Model" of Sinopec during the "13th Five-Year Plan". A number of core technologies of the company have passed the Appraisal of technological achievements, and won honors such as the Science and Technology Progress Award and the Petrochemical Federation Patent Award.

Most of the company's core management personnel are from large enterprises in the petrochemical and coal chemical industries, with rich industry experience and management capabilities. male
The company has a complete marketing team and extensive customer resources, and has established long-term and stable cooperative relations with many large domestic enterprises. The company is CNPC Energy No.1
It is a member of Sinopec's "Three Agents" cooperation network and a first-class production supplier of PetroChina and Sinopec. The company has won the national enterprise management
The first prize of Science Modernization Innovation Achievement.

During the reporting period, there were no adverse changes in the company due to equipment or technology upgrades, resignations of core personnel, loss of franchise rights, or important intangible assets.
Circumstances that seriously affect the company's core competitiveness.

(1) Core technology

1. New biofuel production technology

Relying on the core catalyst, the company uses the self-developed suspended bed process and improved fixed bed process as the core conversion unit, and uses various waste biomass as raw materials
Biofuel production technology has been developed, showing good application prospects.

Among them, hydrocarbon-based biodiesel (HVO) is the company using the suspension bed hydrogenation technology with independent intellectual property rights to carry out hydrodeoxygenation and deoxygenation with waste oil as raw material
Carboxyl and decarbonylation and other reactions for production, this technology has achieved stable industrial operation. The technology has the advantages of wide adaptability of raw materials, simple pretreatment process, and reaction
With the advantages of uniform and stable temperature and low energy consumption, the produced hydrocarbon-based biodiesel products have high yield and excellent quality, and all the products have been exported to Europe.

The company is the drafting unit of the industry standard "hydrocarbon-based biodiesel". The industry standard "Hydrocarbon-based Biodiesel" (NB/T 10897-2021) has been issued by the National Energy Administration
Promulgated and officially implemented on June 22, 2022.

2. Inferior heavy oil MCT suspension bed hydrogenation technology

MCT Suspension Bed Hydrogenation Technology is a high-temperature, high-pressure, hydrogenation reaction to process inferior and heavy raw materials to obtain higher light oil yield and greatly increase production.
Advanced technology for product quality. It adopts the catalyst, process and core equipment developed by the company to carry out mixed cracking of gas, liquid and solid three-phase state in the suspended bed reactor
And hydrogenation reaction, can convert heavy and low-quality raw materials such as coal tar, residual oil, catalytic oil slurry, oil sand asphalt, high-impurity and super-heavy heavy oil into clean gasoline, diesel oil, wax
Oil and chemical raw materials. The yield of light oil is 20-30% higher than traditional processes such as delayed coking.

The industrial demonstration device applying this technology has successfully processed the whole distillate coal tar, Xinjiang naphthenic high-calcium heavy oil, intermediate base vacuum residue and catalytic oil slurry, etc.
quality heavy oil raw material. The conversion rate of processed coal tar is 96-99%, the yield of light oil is 92-95%, the conversion rate of processed heavy oil and residual oil is over 90%, and the yield of light oil is more than 88%
superior.

3. Development and preparation of advanced catalytic purification materials

Since its establishment, the company has carried out more than 20 years of continuous and focused research on catalytic purification material technology. The key research areas include iron-based purification materials, ruthenium-based
Catalytic materials, carbon-based new materials, etc. A complete industrial chain of material research and development, industrialized mass production, and recycling has been formed. Thus developed calcium ferrite,
A series of advanced desulfurization materials such as magnetic iron oxide, amorphous iron oxyhydroxide, and nano-sheet iron oxyhydroxide, as well as suspension bed hydrogenation catalysts, ruthenium-based low-pressure ammonia

Synthesis catalysts, Fischer-Tropsch synthesis catalysts, low-cost methane catalytic combustion catalysts, acetic acid one-step hydrogenation to ethanol catalysts, synthesis gas catalytic deoxidizers, etc.

agent.

The company's continuous research and development of iron-based purification materials and special desulfurizers and purifier series products have the advantages of high sulfur capacity and renewable, which reduces desulfurization costs and can

The resources are recycled and reused, and the products have the characteristics of high efficiency and long life, and have been widely recognized by the market. The company's purification products not only play an important role in protecting the environment

Importantly, there are obvious economic and social benefits, which meet the requirements of the national circular economy development.

The company's core catalyst products are the basis for the development of the company's core process technology, including MCT suspension bed hydrogenation, biofuel production technology, low-pressure ammonia synthesis, fee

Support synthesis and so on.

4. Low-pressure ruthenium-based ammonia synthesis technology

The low-pressure ruthenium-based ammonia synthesis technology is based on a new generation of ruthenium-based ammonia synthesis catalysts. Compared with traditional iron-based ammonia synthesis catalysts, it can

Under normal circumstances, achieving a higher single-pass conversion rate of ammonia synthesis can significantly reduce energy consumption, reduce maintenance costs, and improve safety factors. This technique can be used both for new synthetic

Ammonia plants can also be widely used in energy-saving and production-increasing upgrades of existing synthetic ammonia enterprises.

5. Fischer-Tropsch synthesis technology

Cobalt-based Fischer-Tropsch synthesis technology mainly uses coal, natural gas or synthesis gas generated by biomass conversion to produce high-quality solvent oil and synthetic wax. Cobalt-based Fischer-Tropsch

Compared with petroleum hydrocarbon solvent oils, the solvent oils made from it have a narrow boiling range and a low bromine index.

New environmentally friendly products. The company cooperates with Dalian Institute of Chemical Physics to develop cobalt-based fixed-bed Fischer-Tropsch synthesis technology, combined with self-developed key technologies and systems such as coal coking and gasification

Technology has formed a distributed, flexible and adaptable Fischer-Tropsch synthesis technology. Synthetic waxes produced by this technology have high melting points, high hardness, narrow fractions, etc.

Special performance, with broad market prospects.

Cobalt-based Fischer-Tropsch synthesis technologies are currently only mastered by a few foreign companies, and almost all related products rely on imports, which have good economic benefits and market potential.

force.

6. Slurry hydrogen sulfide removal and recycling technology

Relying on the company's self-developed suspended bed platform technology and advanced desulfurization materials, this technology has formed a unique wet hydrogen sulfide removal process, which can be applied to oil and gas

Large-scale desulfurization fields such as mining and coal chemical industry. Compared with the traditional wet desulfurization technology, this technology realizes the regeneration and recycling of desulfurization materials, and has the advantages of low investment,

It has the advantages of low desulfurization operation cost and no secondary pollution.

(2) Patent situation

During the reporting period, the company obtained a total of 50 patent authorizations, including 22 invention patents and 28 utility model patents. As of December 31, 2022, the company has accumulated

Accumulatively obtained 716 patent authorizations, including 542 invention patents, 173 utility model patents and 1 design patent.

Details of authorized patents during the reporting period:

serial number	Patent No	Invention name	Authorization Announcement	Date Type	Patentee
1	ZL201910463431.4	A kind of wood vinegar liquid hydrogenation catalyst and the technology that ethanol is catalyzed by it	2022-1-28	invention	Hai Xinneng Branch
2	ZL201810410351.8	A wood vinegar hydrogenation process	2022-3-29	invention	Haixinnengke, Beijing Institute of Petrochemical Technology
3	ZL201910520541.X	A modified biomass asphalt and its preparation method	2022-4-19	invention	Sanju Green Energy, Hai Xinneng Technology
4	ZL201810473696.8	Catalyst for hydrogenation liquefaction of biomass, preparation method and method for hydrogenation of biomass	2022-5-10	invention	Hai Xinneng Branch
5	CA3075797	A kind of ruthenium-based ammonia synthesis catalyst suitable for synthesizing ammonia with coal-to-gas process and its preparation method	2022-5-3	invention	National Engineering Research Center of Fertilizer Catalyst, Fuzhou University, China National Petroleum Corporation Petrochemical Research Institute, Haixinnengke

6	ZL201910332501.2 Use of waste agent		2022-7-19	invention	Hai Xinneng Branch
7	ZL201910555583.7	A method for analyzing the composition of waste animal and vegetable oil hydrogenation products	2022-10-28 invention		Haixinnengke, Institute of Process Engineering, Chinese Academy of Sciences
8	ZL201910234142.7 Equipment and	method for preparing spherical catalyst beads	2022-11-11 invention		Hai Xinneng Branch
9	ZL201910949726.2 A sulfur suspension separation agent and its preparation method and application	2022-11-11 Invention			Hai Xinneng Branch; Beijing Institute of Petrochemical Technology
10	US11374246B2 Ammonia fuel cell system and electric device		2022-6-28	invention	Fuzhou University;
11	MY-191775-A	One-pot liquefaction process of biomass or coal and biomass	2022-7-14	invention	Hai Xinneng Branch
12	US11517882B2	A kind of ruthenium-based ammonia synthesis catalyst suitable for synthesizing ammonia with coal-to-gas process and its preparation method	2022-12-6	invention	National Engineering Research Center of Fertilizer Catalyst, Fuzhou University, China National Petroleum Corporation Petrochemical Research Institute, Haixinnengke
13	ZL202011333117.3 A high-temperature desulfurizer and its preparation method and application	2022-1-4		invention	Three Poly Kate
14	ZL202110219879.9 A nanocrystalline amorphous composite coating and its preparation method	2022-6-3		invention	Three Poly Kate
15	ZL201710282933.8	A preparation method of a catalyst carrier and a Fischer-Tropsch synthesis catalyst comprising it	2022-8-9	invention	Three Poly Kate
16	ZL202011316883.9	A kind of hydrolysis absorption type desulfurizer and its preparation method and application	2022-10-28 invention		Three Poly Kate
17	ZL201911416577.X A mesoporous carbon carrier and its preparation method		2022-1-10	invention	Three Poly Kate
18	ZL201910340354.3 A bedding material for poultry breeding and its preparation method and bedding	2022-3-15		invention	Nanjing Sanju
19	ZL201910345017.3 A method for detecting the porosity of porous substances		2022-9-9	invention	Nanjing Sanju
20	ZL201810404738.2 An iron-based hydrogenation catalyst and its preparation method		2022-7-5	invention	Sanju Fuda University; National Engineering Research Center of Fertilizer Catalyst, Fuzhou University
21	ZL202122400983.6 A chemical sewage treatment equipment		2022-4-8 Utility Model	Daqing Sanju	
22	ZL202122400984.0 Styrene storage tank		2022-5-10 Utility Model	Daqing Sanju	
23	ZL202122305487.2 A liquid enhanced volatilization device		2022-4-19 Utility Model	Daqing Sanju	
24	ZL202122521001.9 A heating device for neopentyl glycol production		2022-5-27 Utility Model	Daqing Sanju	
25	ZL202122426776.8 A light and heavy alcohol fat separation device		2022-4-12 Utility Model	Daqing Sanju	
26	ZL202122433129.X A Neopentyl Glycol Steam Melting Device		2022-5-17 Utility Model	Daqing Sanju	
27	ZL202122465808.5 An exhaust gas purification device		2022-5-17 Utility Model	Daqing Sanju	
28	ZL202122521003.8 A styrene recovery device		2022-5-3 Utility Model	Daqing Sanju	
29	ZL202122465814.0 A low energy consumption refining device		2022-4-26 Utility Model	Daqing Sanju	
30	ZL202122400988.9 A device for measuring the density difference medium interface		2022-4-26 Utility Model	Daqing Sanju	
31	ZL202122401261.2 A neopentyl glycol tail gas emergency treatment device		2022-5-17 Utility Model	Daqing Sanju	
32	ZL202122401263.1 An acid-base neutralization mixer		2022-5-10 Utility Model	Daqing Sanju	
33	ZL202122305477.9 A jet reactor		2022-5-10 Utility Model	Daqing Sanju	
34	ZL202122305472.6 A high-efficiency packed tower packing device		2022-5-6 Utility Model	Daqing Sanju	
35	ZL202122401262.7 A packed tower liquid distributor		2022-5-10 Utility Model	Daqing Sanju	

36	ZL202220920439.6 A waste heat recovery heat exchange box for neopentyl glycol production line 2022-8-23 Utility Model Daqing Tripolymer			
37	ZL202220927894.9 A waste heat recovery heat exchanger for neopentyl glycol production 2022-8-23 Utility Model Daqing Tripolymer			
38	ZL202220959795.9 A switch valve tool for neopentyl glycol production line	2022-8-26 Utility Model Daqing Sanju		
39	ZL202220962520.0 A handwheel valve screwing tool for chemical production 2022-7-15 Utility Model Daqing Sanju			
40	ZL202220984499.4 A chemical barrel handling and lifting device for neopentyl glycol production	2022-11-11 Utility Model Daqing Sanju		
41	ZL202221259734.8 A waste gas collection device for neopentyl glycol production 2022-10-11 Utility Model Daqing Tripolymer			
42	ZL202221266992.9 A buffer tank for neopentyl glycol production	2022-9-2 Utility Model Daqing Sanju		
43	ZL202221334430.3 A purge equipment for neopentyl glycol flake crusher 2022-10-14 Utility Model Daqing Tripolymer			
44	ZL202221334622.4 A neopentyl glycol flaking machine cleaning device	2022-10-28 Utility Model Daqing Sanju		
45	ZL202221406584.9 An atomization device for neopentyl glycol production	2022-10-28 Utility Model Daqing Sanju		
46	ZL202221420278.0 A discharge system for neopentyl glycol tank farm	2022-12-20 Utility Model Daqing Sanju		
47	ZL201811575090.1 An improved low-pressure synthetic ammonia synthesis reactor	2022-3-25	invention	Wuhan Jinzhong
48	ZL202010703203.2 A method for separating heavy oil with high solid content	2022-8-12	invention	Wuhan Jinzhong
49	ZL202221481552.5 High-efficiency heat recovery component of the primary cooler based on coal coking production 2022-12-2 Utility model	American coking		
50	ZL202221210626.1 A Drum Machine Unloading and Dust Removal Device for Coke Production Experiment 2022-12-6 Utility Model	American Coking		

4. Main business analysis

1 Overview

During the reporting period, the global economy was oscillating upward in the interest rate hike cycle and the complex geopolitical environment. Commodity prices rose sharply in the first half of the year and fell sharply in the middle of the year. The continuous downward trend and abnormal price fluctuations have caused great disturbance to the company's production and operation.

During the reporting period, the production of the company's bio-energy segment continued to improve. Shandong Sanju achieved long-term stable operation, and the monomer output increased to 103,000 tons. Income has increased significantly year-on-year; with the commissioning of raw material pretreatment equipment, production capacity will be further increased in 2023. During the reporting period, the company invested in the establishment of a new wholly-owned subsidiary Haixin Xinjia Singapore company, improve the biodiesel overseas marketing system, give full play to the location advantages of the Singapore company, develop markets outside the EU, and promote the optimization of customer structure and transaction mode to expand customers along the upstream and downstream of the industrial chain, and to penetrate into end users. The company and its holding subsidiary Shandong Sanju participated in the drafting of "Hydrocarbon-based Biodiesel" (NB/T 10897-2021) industry standards will be implemented in June 2022, which marks that the quality of hydrocarbon-based biodiesel products in my country has entered the era of standardized management.

During the reporting period, the price of coke soared and fell, and the cost of coking was seriously inverted. The company's subsidiary, Meifang Coking, took the initiative to reduce the load and operate, resulting in a large loss in net profit. During the reporting period, the U.S. coking tamping coke project was included in the coking shutdown and elimination list by Wuda District, Wuhai City, Inner Mongolia. Since the company received the letter from the Wuda District government, Continue to communicate and negotiate with the local government. On March 14, 2023, American Coking received the "Reminder Letter on Accelerating the Elimination and Shutdown of Coking Enterprises" from Wuda District, requesting. However, as of the announcement date of this report, whether the tamping coke project of the subsidiary American Coking Co., Ltd. The conditions for shutting down, eliminating and exiting the project, relevant policies, capacity replacement, compensation arrangements and other supporting measures are still unclear. At the same time, the company has drawn the attention of the original shareholders to the government's. The processing progress of the US side's coking project, and make preparations to fulfill the repurchase commitment in accordance with the equity transfer agreement.

During the reporting period, the business of the catalyst segment was affected by the complex economic environment and the trend of the energy industry. Domestic customers delayed replacement of catalysts, making business development more difficult. Large, the completion of the indicators is not satisfactory; the development of Sanju's catalytic purification business in the United States is relatively good, and it maintains profitability; the catalytic purification sector as a whole has basically achieved a break-even balance.

2. Revenue and cost

(1) Composition of operating income

Overall Operating Income

unit: yuan

	2022		2021		Year-on-year increase or decrease
	the amount	Proportion of Operating Income	the amount	Proportion of Operating Income	
Total operating income	8,648,353,147.3 1	100%	5,754,901,863.0 0	100%	50.28%
sector					
new energy resource	1,468,423,162.1 5	16.98% 419	817,009.16	7.29%	249.78%
chemical industry	7,151,405,313.9 6	82.69%	5,324,624,529.9 2	92.53%	34.31%
Other	28,524,671.20	0.33%	10,460,323.92	0.18%	172.69%
sub-products					
Hydrocarbon-based biodiesel	1,468,423,162.1 5	16.98% 419	817,009.16	7.29%	249.78%
Environmental protection materials and	6,807,290,066.2 2	78.71%	2,278,718,133.3 6	39.60%	198.73%
chemical products Energy industry	344,115,247.74	3.98%	1,008,640,196.1 2	17.53%	-65.88%
comprehensive services Oil and gas facilities			2,037,266,200.4 4	35.40%	-100.00%
	28,524,671.20	0.33%	10,460,323.92	0.18%	172.69%
manufacturing					
and comprehensive	939,170,197.78	10.86% 857	998,570.72 122,896,421.08	14.91%	9.46%
services Other sub-regions East China Central Chi	627,891,884.40	6.10%	1,291,528,933.5	2.14%	329.54%
North-east area	628,606,241.90	7.27%	 6	22.44%	-51.33%
North China	3,985,524,608.3 9	46.09% 696	832,355.46	12.10%	472.36%
South China	131,499,435.86	1.52%	185,122,802.31	3.22%	-28.97%
Northwest	794,900,549.63	9.19%	124,930,610.10	2.17%	536.27%
China Southwest China	41,380,157.08	0.48%	93,370,267.66	1.62%	-55.68%
Overseas (including export)	1,599,380,072.2 7	18.49%	2,382,721,902.1 1	41.40%	-32.88%
Sub-sales model					
Direct selling	8,648,353,147.3 1	100.00%	5,754,901,863.0 0	100.00%	50.28%

(2) The industry, product, region, and sales model that account for more than 10% of the company's operating income or operating profit

ÿ Applicable ÿ Not applicable

The company needs to comply with the disclosure requirements for "business related to the chemical industry" in the "Guidelines for Self-Regulatory Supervision of Listed Companies of Shenzhen Stock Exchange No. 3 - Industry Information Disclosure"

unit: yuan

	operating income	operating cost	gross profit margin	Operating income increase or decrease compared with the same period of last year	Increase/decrease in operating costs compared to the same period of the previous year	Gross profit margin increase or decrease compared with the same period of last year
New						
energy by industry	1,468,423,16	1,444,635,26	1.62%	249.78%	194.29%	18.55%

	2.15	4.83				
chemical industry	7,151,405,31 3.96	6,792,931,27 3.02	5.01%	34.31%	49.99%	-9.93%
By product						
Hydrocarbon-based biodiesel	1,468,423,16 2.15	1,444,635,26 4.83	1.62%	249.78%	194.29%	18.55%
Environmental protection materials and chemical	6,807,290,06 6.22	6,519,910,89 0.04	4.22%	198.73%	234.03%	-10.12%
products Energy industry	344,115,247. 74	273,020,382. 98	20.66%	-65.88%	-67.73%	4.53%
comprehensive services Oil and gas facilities manufacturing				-100.00%	-100.00%	-15.03%
and comprehensive services by region						
North China	3,964,854,37 4.96	3,823,325,85 0.56	3.57%	469.90%	585.39%	-16.25%
Huadong Region	935,115,953. 96	890,030,082. 50	4.82%	10.01%	27.77%	-13.23%
Overseas (including export)	1,599,380,07 2.27	1,537,583,75 4.42	3.86%	-32.88%	-27.65%	-6.95%

If the statistical caliber of the company's main business data is adjusted during the reporting period, the company's main business data adjusted according to the caliber at the end of the reporting period in the last year

ÿApplicableÿNot applicable

unit: yuan

product name	Yield	Sales	Realization of income	The price trend of hydrocarbon-based	Reason for change
Hydrocarbon-based biodiesel	13.97	10.20	1,468,423,162.15	biodiesel raw materials and products during the reporting period generally showed an inverted V trend of rising in the first half of the year and continuing to decline in the second half of the year, which is basically consistent with the trend of international crude oil and diesel prices. According to public data from Longzhong Information, Argus, etc., prices continued to rise in the first half of the year, and international crude oil and diesel prices continued to decline since June. From July to December, the price of WTI crude oil fell by 24%, and the price of Okiport diesel fell by 22%. Hydrocarbon-based biodiesel products had the largest decline of 22.6%, and as of December 31, the decline was 17.62%.	Affected by fluctuations in crude oil, diesel prices and European carbon emission trading prices.
Environmentally friendly materials and	217.31	217.84	6,807,290,066.22		
chemical products including: catalyst purifier	1.28	1.41	513,037,284.40	The overall product price is relatively	Downstream demand is
Coke products	174.98	175.29	4,305,462,544.16	stable. In 2022, the coking industry will be affected by the market structure of "strong coal and weak coke".	relatively stable. Affected by the profitability of downstream steel mills and upstream coal supply.

				It is always in a weak position in the industrial chain. The price of coke showed a "V" shape trend from January, continued to fall to the lowest price in early February and then started to rise, reaching 3,400 yuan in March-April, continued to fluctuate downward in May, and rebounded slightly after bottoming out in August. It went sideways from September to late October, started to decline at the end of October and reached a stage low in	
Chemical products (including tar, crude benzene, ammonium sulfate, sulfur)	12.91	12.97	518,047,421.13	early November and then rose steadily. The overall trend is relatively stable, with individual tar prices fluctuating and rising, crude benzene prices rising in the first half of the year and falling in the second half, showing an inverted V trend throughout the year; the price of ammonium sulfate fluctuates throughout the year, and the annual average price is slightly higher than the level	Affected by local supply and demand balance.
LNG	8.05	8.02	463,377,225.48	in the first quarter; Prices rose in the first half of the year, began to plummet in June, and traded sideways at low levels from July to December. After rising at the beginning of the year, the price of liquefied natural gas (LNG) products was relatively stable from January to July, and began to decline sharply in October; after bottoming out in early December, the price rebounded again in the	It is affected by factors such as the price trend of imported natural gas, regional heating demand, and the impact of the macro environment on vehicle travel.
Liquid ammonia	1.84	1.68	59,119,238.94	middle of the month. According to the data of "Longzhong Information", the LNG price in Inner Mongolia had the largest drop of 31.40% from July to December, and the increase was 2.48% as of December 31. Affected by the shortage of natural gas in the world, since February, the amount of ammonia in the international market has been tense, which has led to	Affected by urea production demand and international natural gas prices.

				Oscillation.	
Neopentyl glycol	3.50	3.41	367,365,428.29	The neopentyl glycol market was relatively stable in the first half of the year. Affected by factors such as macroeconomic changes and terminal demand, the market price of neopentyl glycol products began to drop sharply in June. According to the data of "Longzhong Information", the price of neopentyl glycol by hydrogenation method in East China plummeted by 34.29% in June, and continued to fall by as much as 23.48% from July to December, and fell by 18.26% as of December 31. Styrene prices	Affected by downstream demand, raw material prices and other reasons.
Styrene	1.30	1.31	106,187,465.19	soared in the first half of the year and began to fall in June. According to the data of "Longzhong Information", the price of styrene in Northeast China fell continuously from July to December, with a drop of up to 26.20%, and a drop of 22.11% as of December 31. Overall, the first half of the year was	Affected by downstream demand, raw material prices and other reasons.
raffinate carbon nine	7.28	7.29	332,797,993.66	dominated by shocks and upward movements, while the market price in the second half of the year mainly fluctuated within a	affected by fluctuations in crude oil prices.
crude ethylbenzene	1.70	1.80	110,705,361.42	narrow range. Overall, the first half of the year was dominated by shocks and upward movements, while the market price in the second half of the year mainly fluctuated within a narrow range.	affected by fluctuations in crude oil prices.

The operating income or net profit generated by overseas business accounted for more than 10% of the company's audited operating income or net profit in the latest fiscal year

Yes No

Overseas business name	The specific situation	Impact of tax policies on overseas business during the reporting period	The company's response
Sanju Biodiesel Trading and Commissioned Processing Business in Hong Kong	This business mainly develops trade around the company's bio-energy sector, specifically in two modes: general trade and entrusted processing. Among them, entrusted processing mainly involves overseas companies providing raw materials, entrusting domestic production enterprises to carry out processing with supplied materials, and the production enterprises deliver products to overseas companies. Finally delivered to the customer. The payment of this business shall be collected according to the normal	The commissioned processing business is not affected by the domestic tax policy. Changes in the export tax rebate rate will have an impact on business costs, and the general trade business has no impact during the reporting period	If there is a difference in the export tax rebate rate, the company will generally consider its impact on costs when quoting prices to evaluate business costs and profits. There is no change in the export tax rebate rate this year, which has no significant impact on the company.
Natural gas and other acid gas desulfurization services	sales contract. Mainly carry out natural gas desulfurization services in the US oil and gas field market. According to the needs of customers, the company leases special desulfurization equipment and sells desulfurization agents to customers	Since the company purchases equipment and agents from the domestic market, it does not participate in direct production and manufacturing, and is not affected by domestic tax policies.	

	household. The equipment rental fee is paid monthly, and the sales price of the dosage is usually paid in one lump sum of 30 days for old customers.		
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(3) Whether the company's physical sales revenue is greater than labor service revenue

Yes No

Category	project	unit	2022	2021	Year-on-year increase or decrease
Hydrocarbon-based biodiesel	sales volume	Ton	101,980.42	41,735.11	144.35%
	Production	Ton	139,735.51	43,832.48	218.79%
	Inventory	Ton	39,852.46	2,097.37	1,800.12%
Environmental protection materials and chemical products	Sales	Ton	2,178,352.27	484,535.14	349.58%
	Production	Ton	2,173,119.15	482,810.19	350.10%
	inventory	Ton	46,338.14	13,518.43	242.78%
Comprehensive services for the energy industry	Sales volume	Yuan	344,115,247.74	1,008,640,196.12	-65.88%
	Production volume	Yuan	757,020,505.77	325,731,519.03	132.41%
	inventory	Yuan	1,074,922,297.37	662,017,039.34	62.37%
Oil and gas facilities manufacturing and comprehensive services	sales volume	Yuan		2,037,266,200.44	-100.00%
	production	Yuan		2,094,350,237.90	-100.00%
	inventory	Yuan			

Explanation of the reasons for the year-on-year change of more than 30% in relevant data

Applicable Not applicable

During the reporting period, the company's hydrocarbon-based biodiesel entered the stage of mass production, and the production, sales and safety stock amount increased significantly year-on-year; the company acquired Meifang Coking at the end of 2021, and the full amount was consolidated during the reporting period, resulting in the production, sales and inventory data of environmental protection materials and chemical products. The increase was relatively large; the sales volume of comprehensive services in the energy industry decreased significantly and the production volume increased mainly due to the strategic transformation of the company during the reporting period. Incorporated into the scope of the company's consolidation, the oil and gas facility manufacturing and comprehensive services have dropped significantly.

(4) Performance of major sales contracts and major purchase contracts signed by the company as of the reporting period

ApplicableNot applicable

(5) Composition of operating costs

Industry and Product Classifications

Industry and Product Classifications

unit: yuan

Category	project	2022		2021		Year-on-year increase or decrease
		the amount	Proportion of operating cost	the amount	Proportion of operating cost	
New energy main business	cost	1,444,635,264.83	17.48%	490,883,324.18	9.77%	194.29%
chemical industry	Main business cost	6,792,931,273.02	82.21%	4,528,951,640.20	90.17%	49.99%
other	Other operating costs	25,310,589.61	0.31%	3,030,958.27	0.06%	735.07%
total		8,262,877,12	100.00%	5,022,865.92	100.00%	64.51%

		7.46		2.65		
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unit: yuan

Product Categories	project	2022		2021		Year-on-year increase or decrease
		the amount	Proportion of operating cost	the amount	Proportion of operating cost	
Hydrocarbon-based biodiesel total		1,444,635,264.83	17.48%	490,883,324.18	9.77%	194.29%
Hydrocarbon-based Biodiesel Direct Materials		1,115,706,363.88	77.24%	338,748,637.87	69.01%	229.36%
Hydrocarbon-based biodiesel fuel power		83,845,834.17	5.80%	38,358,403.95	7.81%	118.59%
Hydrocarbon-based biodiesel direct artificial		8,093,926.32	0.56%	6,753,790.07	1.38%	19.84%
Hydrocarbon-based biodiesel manufacturing costs		96,378,184.96	6.67%	42,254,816.58	8.61%	128.09%
Other direct costs of hydrocarbon-based biodiesel		140,610,955.50	9.73%	64,767,675.71	13.19%	117.10%
Environmentally friendly materials and chemical	total	6,519,910,890.04	78.91%	1,951,899,250.74	38.87%	234.03%
products Environmentally friendly materials and	direct material	5,392,508,585.78	82.71%	1,439,236,578.73	73.73%	274.68%
chemical products Environmentally friendly materials	fuel power	204,221,369.68	3.13%	153,644,765.32	7.87%	32.92%
and chemical products Environmentally friendly materials	Direct labor	109,732,402.66	1.68%	51,913,053.78	2.66%	111.38%
and chemical products Environmentally friendly materials	Manufacturing costs	434,207,791.48	6.66%	282,151,266.80	14.46%	53.89%
and chemical products Environmentally friendly materials	other direct costs	379,240,740.44	5.82%	24,953,586.11	1.28%	1,419.78%
and chemical products Energy industry	total	273,020,382.98	3.30%	845,951,492.90	16.84%	-67.73%
comprehensive services Oil and gas facility manufacturing and comprehensive services	total	0.00	0.00%	1,731,100,896.56	34.46%	-100.00%
other	total	25,310,589.61	0.31%	3,030,958.27	0.06%	735.07%

illustrate

none

(6) Whether the scope of consolidation has changed during the reporting period

Yes No

Subsidiary type	Company Name	business nature	Obtaining method	Change from previous year
Wholly owned subsidiary	HAIXIN ENERGY TECHNOLOGY INTERNATIONAL PTE.LTD.	General trade and consulting services	Investment and establishment	new additions in this period

(7) Major changes or adjustments in the company's business, products or services during the reporting period

ApplicableNot applicable

(8) Major sales customers and major suppliers

The company's main sales customers

The total sales amount of the top five customers (yuan)	2,957,978,967.46
The ratio of the total sales amount of the top five customers to the total annual sales	34.20%
The ratio of the sales of related parties among the sales of the top five customers to the total annual sales	0.00%

The company's top 5 customer profiles

serial number	client's name	Sales (yuan)	Proportion of total annual sales
1	customer 1	1,087,966,136.44	12.58%
2	customer 2	539,872,884.57	6.24%
3	customer 3	503,978,690.24	5.83%
4	customer 4	421,943,439.91	4.88%
5	customer 5	404,217,816.30	4.67%
total		2,957,978,967.46	34.20%

Other information about major customers

ÿ Applicable ÿ Not applicable

The company's top five customers do not have any associated relationship with the company as stipulated in the "Shenzhen Stock Exchange Growth Enterprise Market Stock Listing Rules", and the company's directors, supervisors, senior management

Personnel, core technical personnel, shareholders holding more than 5% of the shares, actual controllers and other related parties do not directly or indirectly have interests in the company's top five customers.

The company's main suppliers

The total purchase amount of the top five suppliers (yuan) The	4,120,887,368.08
proportion of the total purchase amount of the top five suppliers to the total annual purchase amount	43.98%
Proportion of purchases from related parties among the top five suppliers in the total annual purchases	0.00%

The company's top 5 suppliers

serial number	Supplier Name	Purchase amount (yuan)	Proportion of total annual purchases
1	Supplier 1	2,081,672,643.82	22.21%
2	supplier 2	786,977,186.26	8.40%
3	Supplier 3	527,261,634.65	5.63%
4	Supplier 4	415,263,404.95	4.43%
5	Supplier 5	309,712,498.40	3.31%
total		4,120,887,368.08	43.98%

Other information about major suppliers

ÿ Applicable ÿ Not applicable

The company's top five suppliers do not have any associated relationship with the company as stipulated in the "Shenzhen Stock Exchange Growth Enterprise Market Stock Listing Rules", and the company's directors, supervisors, senior management

Management personnel, core technical personnel, shareholders holding more than 5% of the shares, actual controllers and other related parties do not directly or indirectly have interests in the company's top five suppliers.

3. Cost

unit: yuan

	2022	2021	Year-on-year increase or decrease	Description of major changes
sales expense	66,487,467.38	62,167,036.22	6.95%	No material change.
Management costs	345,705,940.64	394,949,623.03	-12.47%	No major changes. The main reasons
Financial expenses	317,461,285.52	183,627,453.58	72.88%	are: (1) The interest on borrowings from financial institutions of the company and its subsidiaries and the interest on financial assistance funds from Haiguo Investment Group increased; (2) the company's control

				The joint-stock subsidiary Meifang Coking was included in the scope of the
R & D costs	219,137,189.46	184,285,598.08	consolidated statement	18.91% No major changes.

4. R&D investment

✓ Applicable ✗ Not applicable

Main research and development project name	project purpose	Project Progress	intended goal	Expected impact on the company's future development
Series of purification agent technology upgrade and industrial application	Development of new purifying agent and performance improvement of purifying agent products.	Completed the determination of product formula, the finalization of production process, and the completion of	Improve product performance, determine formula, and achieve stable production.	Enrich the company's purifier product categories and expand product market share.
γ-Olefin Technology Development	γ-Olefin Process Technology Development	industrial scale-up. Completed the scale-up production of the catalyst in the pilot scale, and obtained the industrial agent; developed a complete separation process of γ-olefin, and obtained the target product through the verification of	Possess catalyst industrial production technology and master 10,000-ton process technology.	Fill in the domestic gap, enhance the company's technological advantages and the coal chemical industry chain
Development of hydrocarbon-based biodiesel hydroisomerization technology	development of new catalysts	the pilot plant. Developed a new type of catalyst with good evaluation performance; completed pour point depressing tests for naphtha and tail oil. Carry out technical research on the preparation of	A new type of catalyst that can be produced and applied industrially	Enhance the company's ability to produce low freezing point renewable diesel and sustainable aviation fuel
Bioenergy Technology Development	According to the characteristics of various types of raw oil, develop corresponding processing methods. Catalyst developed for waste grease.	jet fuel. Complete the development of raw material pretreatment process; complete the analysis and evaluation experiments of various raw material properties, and obtain the factors and laws that affect the hydrogenation characteristics of raw materials and oil yield. Complete catalyst development and scale-up.	Realize industrialized raw oil treatment technology. Realizes the first industrial application of a catalyst	Ensure the stability of production equipment and expand the source of raw materials

The company's research and development personnel

	2022	2021	Variation ratio
Number of R&D personnel (person)	211	221	-4.52%
Proportion of R&D personnel	7.08%	11.93%	-4.85%
R & D personnel education			
undergraduate	74	120	-38.33%
Age	19	48	-60.42%
composition of R&D	7	8	-12.50%
personnel	61	25	144.00%
with master's	50	20	150.00%
degree or above, junior college or below			
under 30	32	45	-28.89%
30-40 years old	111	101	9.90%
Over 40 years old	68	75	-9.33%

The amount of R&D investment and the proportion of the company's operating income in the past three years

	2022	2021	2020
R&D investment amount (yuan)	281,919,026.55	227,896,929.70	272,254,579.48
The ratio of R&D investment to operating income	3.26%	3.96%	3.82%
The amount of R&D expenditure capitalized (yuan)	62,781,837.09	43,611,331.62	50,282,216.98

Capitalized R&D expenditure as a percentage of R&D investment	22.27%	19.14%	18.47%
The ratio of capitalized R&D expenditure to current net profit	-6.32%	80.01%	-3.71%

Reasons and effects of major changes in the composition of the company's R&D personnel

ŸApplicableŸNot applicable

The reasons for the significant change in the proportion of total R&D investment in operating income compared with the previous year

ŸApplicableŸNot applicable

Reasons for large fluctuations in the capitalization rate of R&D investment and their rationale

ŸApplicableŸNot applicable

5. Cash flow

unit: yuan

project	2022	2021	Year-on-year increase or decrease
Subtotal of cash inflow from operating activities	7,159,663,643.69	5,812,374,904.66	23.18%
Subtotal of cash outflow from operating	7,670,254,126.86	4,788,071,954.52	60.20%
activities Net cash flow from operating activities	-510,590,483.17	1,024,302,950.14	-149.85%
Subtotal of cash inflows from investing activities	98,738,677.74	680,458,648.00	-85.49%
Subtotal of cash outflows from investing activities	213,076,495.21	1,592,973,828.17	-86.62%
Net cash flow from investing activities	-114,337,817.47	-912,515,180.17	87.47%
Subtotal cash inflow from financing activities	4,391,932,956.19	3,407,539,550.86	28.89%
Subtotal of cash outflows from financing activities	3,673,528,785.29	4,844,605,518.08	-24.17%
Net cash flow from financing activities	718,404,170.90	-1,437,065,967.22	149.99%
Net increase in cash and cash equivalents	97,310,141.69	-1,335,349,332.42	107.29%

Explanation of the main factors affecting the significant year-on-year changes in relevant data

Ÿ Applicable Ÿ Not applicable

1. The net cash flow from operating activities decreased by 149.85% compared with the same period of the previous year, mainly because: during the reporting period, Jutal was no longer included in the scope of consolidated statements and

This is due to the fact that Meifang Coking was included in the scope of the consolidated statement in this period.

2. The net cash flow from investment activities increased by 87.47% compared with the same period of last year, mainly because: Jutal will no longer be included in the contract at the end of June 2021 in the same period of last year

The scope of consolidated statements resulted in an increase in cash outflows from investment activities, which was not affected during the reporting period.

3. The net cash flow from financing activities increased by 149.99% compared with the same period of the previous year, mainly due to: during the reporting period, (1) Shandong San

(2) In the same period of last year, Sanju Green Energy, a wholly-owned subsidiary of the company, repaid loans from financial institutions, and there was no such incident in the reporting period.

ring.

Reasons for the significant difference between the net cash flow generated by the company's operating activities during the reporting period and the net profit for the year

Ÿ Applicable Ÿ Not applicable

During the reporting period, the net cash flow generated by the company's operating activities was -511 million yuan, which was significantly different from the current year's net profit of -994 million yuan. The main reasons were:

During the reporting period, it was due to the impairment of assets such as accounts receivable, other receivables, and inventories, and the recognition of investment losses in joint ventures.

V. Non-main business conditions

√ Applicable √ Not applicable

unit: yuan

	the amount	Proportion of total profit	The reasons for the formation	indicate whether it is sustainable
investment income	-112,350,582.58	11.01%	It is mainly the investment income generated by accounting for long-term equity investment	no
asset impairment	-336,570,972.15	32.98%	using the equity method. It mainly includes bad debt losses of accounts receivable, impairment losses of contract assets and	yes
Non-operating income	1,123,469.52	-0.11%	losses of inventory depreciation. Mainly for liquidated	no
Operating expenses	4,437,078.32	-0.43%	damages received. Primarily for breach of	no
other income	10,261,989.41	-1.01%	contract fines paid. It is mainly government subsidies included in the current profit and loss.	yes

6. Analysis of Assets and Liabilities

1. Significant changes in asset composition

unit: yuan

	end of 2022		early 2022		Explanation of major changes	in proportion increase or decrease
	the amount	Proportion of total assets		Proportion of total assets		
Money funds	485,402,466.04	3.18%	526,309,228.92	3.56%	-0.38%	There is no major change in
accounts receivable	1,434,317,831.52	9.39%	1,248,802,595.02	8.46%	0.93%	proportion. There is no major change
contract assets	254,271,281.01	1.66%	277,182,326.69	1.88%	-0.22%	in proportion. There is no major change
stock	2,580,103,484.45	16.89%	1,753,072,398.20	11.87%	5.02%	in proportion. The main reasons are: During the reporting period, the inventory of the company and its wholly-owned subsidiaries Sanju Hong Kong and Sanju Green
investment property		0.00%		0.00%	0.00%	Energy increased. There is no major
Long-term equity investment	1,060,808,249.03	6.94%	1,533,588,980.48	10.39%	-3.45%	change in proportion. There is no
fixed assets	3,440,929,326.79	22.53%	3,761,243,963.86	25.47%	-2.94%	major change in proportion. There
Construction in progress	72,934,469.99	0.48%	82,664,830.02	0.56%	-0.08%	is no major change in proportion. There
right-of-use asset	81,045,857.77	0.53%	69,744,044.89	0.47%	0.06%	is no major change in proportion. There
short-term loan	681,614,108.69	4.46%	368,182,379.43	2.49%	1.97%	is no major change in proportion. There
contract liabilities	603,694,611.84	3.95%	326,602,054.48	2.21%	1.74%	is no major change in proportion. There is no major change in proportion.

Long term loan	462,846,350. 34	3.03%	602,836,279. 68	4.08%	-1.05%	There is no major change in
lease liability	41,049,131.5 7	0.27%	48,169,074.2 1	0.33%	-0.06%	proportion. There is no major change in proportion.

High proportion of foreign assets

ÿApplicableÿNot applicable

2. Assets and liabilities measured at fair value

ÿApplicableÿNot applicable

3. Restrictions on asset rights as of the end of the reporting period

project	Ownership certificate number (housing, land	Restricted reason	restricted period
Economic Development has land use rights, 0000314 Ownership number	certificate number) Mongolia (2020) Alashan housing development area real estate rights No.	Bank loan mortgage guarantee, the mortgagee is from September 12, 2016 to September 30, 2026, China Construction Bank Alashan Branch Day	
mechanical equipment		Bank loan mortgage guarantee, the mortgagee is from January 11, 2017 to September 30, 2026 China Construction Bank Alashan Branch Bank loan mortgage guarantee, the mortgagee is from September 7,	
State-owned land use rights, housing Ownership No. 0008151	Mongolia (2020) Wuda District Real Estate	2021 to September 7, 2024 Hai Bank Uda Sub-branch bank August 19, 2022 to August	loan mortgage guarantee, the mortgagee is Uzbekistan from
mechanical equipment		18, 2023 Hai Bank Wuda Sub-branch daily sale and leaseback person from December 23, 2019 to 2023 In June 2020, Qingcheng Yu Financial	mortgage guarantee, the mortgagee is the most important
mechanical equipment		Leasing Co., Ltd. sold and leased back mortgage guarantees on the 24th. The mortgagee was Hu. From October 27, 2020 to October 2023, Beixing Financial Leasing Co., Ltd. sold and leased back on the 31st. The lessor	
machinery, structures		was Huaxu International Financing August 27, 2021 to February 22, 2026 Leasing Co., Ltd. Sale and Leaseback Mortgage Guarantee, Mortgage Holder March 4, 2022 to March 4, 2024 Cheng Guoxing Financial	
mechanical equipment		Leasing Co., Ltd. Sale Back lease, the lessor is China Railway May 25, 2027	Construction Financial Leasing Co., Ltd. from May 24, 2022 to
machinery, structures			
mechanical equipment			
mechanical equipment		Sale and leaseback mortgage guarantee, the mortgagee is from May 31, 2022 to May 31, 2024 Cheng Guoxing Financial Leasing Co., Ltd.	
Money funds	For details, please refer to Note VII. 1. Monetary Funds of Section 10 Financial Report		

7. Analysis of Investment Status

1. Overall situation

ÿ Applicable ÿ Not applicable

Investment amount during the reporting period (yuan)	Investment amount in the same period of last year (yuan)	range of change
23,330,000.00	1,738,602,689.66	-98.66%

2. Major equity investment acquired during the reporting period

ÿ Applicable ÿ Not applicable

unit: yuan														
Invested company name	Main business	investment method	investment amount	Shareholding ratio of funds	Sources of funds	partner	investment period	product type	Progress as of balance sheet date	Estimated income	Current investment profit and loss	Whether involved in litigation	Disclosure date	Disclosure index (if any)
Fuda Zijin Hydrogen Energy Technology Co., Ltd.	Development and Promotion of Ammonia- Hydrogen Energy Technology	New	13,3 30,0 00.0 0	5.00 %	Patent technology price contribution	Zijin Mining Group Co., Ltd., Fuzhou University Asset Management Co., Ltd.	long	new energy, new material	Complete registration	0.00 0.00	no		January 04, 2022, March 1, 2022	Juchao Information Network (Announcement No.: 2022 002y (Notice No.: 2022 007 y
total--			13,3 30,0 00.0 0							0.00 0.00				

3. Significant non-equity investments in progress during the reporting period

ÿ Applicable ÿ Not applicable

unit: yuan												
project name	investment method	Whether it is fixed asset investment	Investment projects involve industries	Investment amount in this reporting period	Cumulative actual investment amount as of the end of the reporting period	Sources of funds	project progress	Estimated income		The reasons for not reaching the planned progress and	Disclosure date (if any)	Disclosure index (if any)
Bozhou Sanju Lvhui 10,000- ton Straw Biomass Comprehensive Recycling Project	Self-built is		Chemical raw materials and chemical products manufacturing	2,259 ,141. 81	33,32 1,661 .03	self- funded	61.00 %	17,67 7,600 .001	0.00	expected income were the adjustment of the company's industrial	February 28, 2019	Juchao Information Network (Announcement No.: 2019-016)
Pingluo self-built is chemical					4,419	Self-raised	3.00% 17,17			structure, and the progress of the ecological agriculture project was delayed. 0.00	Company 2019 Ju	

Sanju Lvyuan 10,000- ton Straw Biomass Comprehensive Recycling Project			Raw material and chemical manufacturing		,681. 24	funds		4,100 .002		The industrial structure is adjusted, and the progress of ecological	May 29	Information Network (Announcement No.: 2019- 067)
Fuxin Sanju Lvyuan 10,000- ton Straw Biomass Comprehensive Recycling Project	Self-built is		Chemical raw materials and chemical products manufacturing		6,193 ,219. 70	self- funded	1.00%	17,10 1,900 .003	0.00	agriculture projects has been delayed. The company's industrial structure is adjusted, and the progress of ecological agriculture projects has been delayed.	May 29, 2019	Juchao Information Network (Announcement No.: 2019-069)
total--				2,259 ,141. 81	43,93 4,561 .97			51,95 3,600 .004	0.00			

Note: 1 Bozhou Sanju Lvhui 10,000-ton Straw Biomass Comprehensive Recycling Project Expected income: average annual net profit of 17,677,600 yuan, after-tax net payback period (including construction period of 1 year) 7.23 years. 2 Estimated income of Pingluo Sanju Lvyuan 10,000-ton straw biomass comprehensive recycling project: average annual net profit of 17,174,100 yuan, net payback period after tax (including 1 year construction period) of 728 years. 3 Fuxin Sanju Lvyuan 10,000-ton Straw Biomass Comprehensive Recycling Project Estimated income: average annual net profit of 17,101,900 yuan, after-tax net payback period (including construction period of 1 year) 7.39 years. 4 The forecast data of the above projects are all derived from the feasibility study report and are not used as the actual performance forecast of the company.

4. Financial asset investment

(1) Securities Investment

ApplicableNot applicable

There was no securities investment in the company during the reporting period.

(2) Investment in derivatives

ApplicableNot applicable

There was no derivative investment in the reporting period of the company.

5. Use of raised funds

Applicable Not applicable

(1) Overall use of raised funds

Applicable Not applicable

Unit: ten thousand yuan

Recruitment year	Recruitment method	Total funds raised	The total amount of raised funds used in this period	The total amount of raised funds that have been used accumulatively	The total amount of raised funds with changed purposes during the reporting period	The total amount of raised funds that have been changed in purpose	Proportion of total raised funds that have been changed in purpose	Total unused funds raised	Use and whereabouts of unused raised funds	The amount of funds raised if it has been idle for more than two years
2019 year	Public offering of renewable corporate bonds to qualified investors	30,772.53	0	30,772.53	0	0	0.00%	0		0
total--		30,772.53	0	30,772.53	0	0	0.00%	0		0
Description of overall use of raised funds										
Approved by the China Securities Regulatory Commission's Zheng Jian Ke Ke [2018] No. 1963, the company publicly issued renewable corporate bonds (first tranche) of RMB 333,000,000.00 to qualified investors in 2019 (the issue price is RMB 100 per bond, and the coupon rate is RMB 100). 7.00%), after deducting various issuance expenses of RMB 25,274,700.00, the actual net proceeds raised are RMB 307,725,300.00, which will arrive on April 30, 2019. All the funds raised in this issue of bonds will be used to supplement the company's working capital. On May 5, 2022, the interest payment will be completed and delisted, and the raised funds storage account will be canceled on July 15, 2022.										

(2) Projects committed to raising funds

Applicable Not applicable

Unit: ten thousand yuan

Commitment to investment projects and over-raised funds	Whether the project has been changed (including partial changes)	The total investment commitment of raised funds	Adjusted total investment(1)	Investment amount in this reporting period	Cumulative investment amount as of the end of the period (2) period (3) = (2)/(1)	Investment progress by the end of the period (2) period (3) = (2)/(1)	Item reaches intended usable status date	Benefits realized during the reporting period	Accumulated benefits realized by the end of the reporting period	Whether to achieve the expected benefits	Has there been a major change in the feasibility of the project?
Promised investment											
projects to replenish	no	30,772.53	30,772.53	0	30,772.53	100.00%		0	0	Not applicable	No
working capital Committed investment		30,772.53	30,772.53	0	30,772.53			0	0		
projects Subtotal Over-raised											
funds invested											
total--		30,772.53	30,772.53	0	30,772.53			0	0		
Explain by project the situation and reasons for not reaching the planned progress and expected benefits (including the option of "whether the expected benefits have been achieved"	none										

reason for selecting "not applicable")	
In case of major changes in project feasibility, the amount, use and	none
progress of use of over-raised funds shall be explained	not applicable
Changes in the implementation location of investment projects with raised funds	not applicable
Adjustments to the Implementation Mode of Fund-raising Investment Projects	not applicable
The initial investment and replacement of investment projects with raised funds	not applicable
Temporarily supplement working capital situation with idle raised funds	not applicable
The amount and reasons for the balance of raised funds in project implementation	not applicable
Use and whereabouts of unused raised funds	none
Use and Disclosure of Raised Funds	none

problems or other situations in	
--	--

(3) Changes to projects with raised funds

ApplicableNot applicable

During the reporting period, the company did not have any changes in projects with raised funds.

8. Sales of major assets and equity interests

1. Sale of major assets

ApplicableNot applicable The

company did not sell any major assets during the reporting period.

2. Sale of major equity interests

ApplicableNot applicable

9. Analysis of main controlling and shareholding companies

Applicable Not applicable

Main subsidiaries and shareholding companies that affect the company's net profit by more than 10%

unit: yuan

Company Name	Company Type	Main Business Registered	Capital Total	Assets Net	Assets Operating	Income Operating	Profit Net	Profit Net
Shenyang Sanju Kite Catalyst Co.,	Subsidiary	Production of catalysts and new catalytic materials	275,000,000.00	958,279,958.29	603,487,606.48	430,671,623.76	20,500,426.02	15,152,505.22
Ltd. Beijing Sanju Green Energy	Subsidiary	Technical services, sales of chemical products	500,000,000.00	2,494,741,783.61	707,299,647.90	1,624,884.95	120,084,968.08	120,084,968.08
Technology Co., Ltd. Daqing Sanju	Subsidiary	Production and sales of styrene and neopentyl glycol	100,000,000.00	329,314,191.30	48,755,175.49	920,724,430.05	50,317,566.85	51,165,192.78
Energy Purification Co., Ltd. Inner Mongolia Sanju Jiajing New Energy Co., Ltd.	Subsidiary	Clean LNG Production and Sales	300,000,000.00	913,471,798.08	581,656,409.98	553,473,806.01	144,615,052.33	129,642,717.28
Wuhan Jinzhong Engineering Technology Co., Ltd.	Subsidiary	Technical services, engineering survey and design, construction general contracting, engineering	16,800,000.00	505,554,773.51	137,977,072.57	139,646,622.11	40,017,209.85	32,678,297.29
Beijing Huashi United Energy Technology Development Co., Ltd.	Subsidiary	project management Engineering survey and design; construction general contracting; construction	205,000,000.00	311,903,433.18	310,813,776.79	1,030,188.65	7,681,985.38	7,681,985.38

		Engineering project management; engineering						
Sanju Environmental Protection (Hong Kong) Co., Ltd.	Subsidiary	consulting and other technical services in the energy field, equipment and material sales,	HKD 1,069,879,900	1,783,774 ,335.95	857,576,7 96.25	1,467,989 ,887.81	210,086,0 81.84	210,152,7 39.57
SJ ENVIRONMETAL CORP	Subsidiary	investment and investment management entrusted production and processing of chemical products, machinery and equipment;	USD 20,000,000	204,827,1 56.12	198,970,8 84.39	123,604,4 49.62	29,303,89 2.85	29,444,46 0.58
Fujian Sanju Fuda Chemical Fertilizer Catalyst National Engineering	Subsidiary	Fertilizer and coal chemical related technology research and development and transfer of achievements	30,000,000.00	25,439,108.03	25,327,250.21	4,767,920.72	31,193.0929,711.72	
Research Center Co., Ltd. Sichuan	Subsidiary	R&D and sales of new energy technology products	50,000,000.00	553,500,553.80	279,314,313.50	2,432,045.48	130,770,276.96	131,020,399.14
Xinda New Energy Technology Co., Ltd.	Subsidiary	Production and sales of biofuels	455,000,000.00	1,882,384,902.68	340,764,705.11	643,564,619.18	19,851,303.55	13,343,974.76
Inner Mongolia Meifang Coal Coking Co., Ltd.	Subsidiary	Production and sales of coke products, ammonium sulfate, desulfurizers, coal tar, sulfur, and crude benzene	917,388,800.00	2,851,044,989.07	1,315,642,923.10	4,957,665,960.97	268,829,414.97	273,882,463.68
Jutal Offshore Oil Services Co., Ltd.'s	Joint stock company	Oil and Gas Facilities Manufacturing	17,783,000.00	3,179,462,000.00	1,747,247,000.00	1,750,927,000.00	197,844,000.00	208,234,000.00

acquisition and disposal of subsidiaries during the reporting

period ÿ Applicable ÿ Not applicable

Company Name	Ways of acquiring and disposing of subsidiaries during the reporting period	Impact on overall production operations and performance
HAIXIN ENERGY TECHNOLOGY INTERNATIONAL PTE.LTD.	Investment establishment	no major impact

Explanation of the main holding and shareholding companies

During the reporting period, the company had no information on important holding and shareholding companies that should be disclosed.

X. Structured entities controlled by the company

ÿApplicableÿNot applicable

11. Prospects for the company's future development

(1) The company's business priorities in 2023

In 2023, the company will continue to promote asset optimization and consolidation, divest inefficient assets, focus on the main business of bioenergy, and expand and strengthen core operating assets. The company will pass

Clarify the specific measures for strategically focusing on the main business, optimizing assets to improve quality and efficiency, and lean management to improve operations, so as to effectively improve operating efficiency.

The bio-energy industry is the most important development direction of the company, and the company will concentrate its superior resources to build a bio-energy procurement, supply and marketing system. The Bioenergy Division will improve the sea

Overseas procurement and sales system, develop markets outside the European Union, promote the optimization of customer structure and transaction mode, expand customers along the upstream and downstream of the industrial chain, and penetrate into end users. Shandong three

As the main production base, Juju has initially achieved long-term stable operation. In 2023, it will continue to improve production capacity through technological innovation, management improvement and operation optimization.

increase production capacity and reduce production costs; actively plan to increase production capacity and enrich product lines to achieve the scale effect of Shandong trimer monomers.

Catalytic purification business gives full play to its technological advantages to serve the company's bioenergy industry; introduces and promotes high value-added products, develops new domestic markets, and further expands

Expand overseas desulfurization service market share.

The company will actively negotiate with Wuda District of Wuhai City whether the US coking company is suitable for shutdown, elimination and exit conditions, exit plans, capacity replacement, compensation arrangements and other supporting measures

To form clear conclusions and related plans as soon as possible to eliminate uncertainties.

The company will continue to improve the structure of assets and liabilities, and improve the return on assets by optimizing assets and recovering accounts receivable.

(2) Risks that the company may face

1. Risk of raw material and product price fluctuations

The company's main business is bio-energy and new coal chemical industry, which are closely related to the bulk commodity market and are greatly affected by the international and domestic macroeconomic environment. In 2022,

Due to the large fluctuations in product prices in the process of raw material procurement and processing, the bioenergy business has a significant impact on profit margins. Compared with the first half of the year, the gross profit margin in the second half of the year dropped from 5.01% to

1.33%; the coking industry is in the middle reaches of the coal, coke and steel industry chain, and has always been in a weak position in the industry chain, and is more sensitive to price fluctuations. The company will strive to improve the

The ability to study and judge product market conditions, carry out in-depth research on the correlation between biodiesel raw materials and products, ICE diesel and palm oil, and study coking coal coke hedging schemes, benefit

Use the commodity financial market to avoid the risk of falling prices in the spot market.

2. The risk that the production capacity of bioenergy will not meet expectations

The bulk of biodiesel is becoming more and more obvious, and scale will become the core competitiveness of enterprises, which can effectively reduce production costs. 10.3 Production Products of Shandong Sanju in 2022

It will take a certain amount of time for large-scale industrial projects to reach full capacity and generate economic benefits, and there are uncertainties. The company will set

The core superior technical resources in the center, constantly optimize the equipment, adjust the production process parameters, gradually increase the production load of the equipment, and realize the full capacity of the equipment as soon as possible, creating a new life for the company.

Create benefits.

3. Risk of collection of accounts receivable

The company formed a relatively large amount of accounts receivable in the early stage of business development. Through business transformation, the company adjusted its strategic direction and reduced the construction schedule of advance funds.

scale, increased the recovery of accounts receivable, and the balance of accounts receivable has dropped significantly compared to the peak value, but there are still some accounts receivables that have not been fully recovered.

Risk of credit impairment. The company will continue to strengthen customer credit tracking management, accelerate the recovery and transfer of the company's accounts receivable through various channels, and strive to reduce the impairment

Risks are minimized.

4. Overseas business risks

The company's bioenergy industry is currently mainly an export-oriented business model, and all biodiesel products are currently used for export. Due to changes in overseas markets and policies, exchange rate changes

Affected by factors such as globalization, there is a certain degree of uncertainty. The company establishes and improves the supply chain system, obtains raw materials and sells products through multiple channels, so as to diversify the market from being too single

risks of. At the same time, the company actively optimizes production technology, continuously improves operations, and strives to keep production costs at the lowest level in the industry and product quality to reach the highest level in the industry.

Excellent level to improve the company's product competitiveness. The company will also increase the production capacity of low-condensation products, adjust the structure of high-condensation and low-condensation products according to market demand, and increase profit

profit ability. At the same time, the company will actively promote the domestic pilot application of second-generation bio-energy, develop the domestic market, and contribute to the country's energy conservation, emission reduction and energy security.

12. Registration form for receiving research, communication, interviews and other activities during the reporting period

√ Applicable √ Not applicable

Reception Time	Reception Location	Reception Method	Reception Object Type	Reception Object	Main content discussed and information provided	Index of Basic Situation of Research
April 29, 2022	Value Online (https://www.wironline.com.cn/)	other	other	Investment individuals and institutions participating in the company's 2021 online performance briefing	The company's operating performance, development strategy, etc.	For details, please refer to the record sheet of investor relations activities released by the company on Interactive Easy on April 29, 2022.

Section 4 Corporate Governance

1. The basic situation of corporate governance

	<p>During the reporting period, the company, in accordance with the "Company Law", "Securities Law", "Code of Corporate Governance for Listed Companies", "Shenzhen Stock Exchange GEM Stock Listing Regulations"</p> <p>", "Shenzhen Stock Exchange Listed Companies Self-Regulatory Guidelines No. 2 - Standardized Operation of GEM Listed Companies" and other relevant laws and regulations, combined with the requirements of the company</p> <p>According to the actual situation of the company, the "Articles of Association" and various internal control systems have been improved and improved, and the functions and roles of the special committees of the board of directors have been fully utilized to ensure the</p> <p>Scientific and procedural decision-making of the board of directors, continuous improvement of the company's legal person governance structure and internal control system, further standardization of the company's operations, and continuous improvement of corporate governance</p> <p>reasonable level.</p> <p>1. Shareholders and general meeting of shareholders</p> <p>Shareholders of the company enjoy equal status and undertake corresponding obligations according to the shares they hold in accordance with the provisions of the "Articles of Association" and "Rules of Shareholders' Meetings of Listed Companies". male</p> <p>The corporate governance structure can ensure that all shareholders, especially small and medium-sized shareholders, enjoy equal status, ensure that shareholders can legally exercise their rights and interests, and ensure that shareholders have complete control over major issues of the company.</p> <p>Right to know, right to participate, right to vote. During the reporting period, 5 general meetings of shareholders were held, including 1 annual general meeting and 4 extraordinary general meetings.</p> <p>According to relevant laws, administrative regulations, departmental rules, normative documents and the company's articles of association, matters that should be voted on by the general meeting of shareholders shall be in accordance with the relevant laws and regulations.</p> <p>Appropriate powers are reviewed and approved by the general meeting of shareholders, and there is no such thing as ultra vires approval or deliberation after implementation.</p> <p>2. The company and the controlling shareholder</p> <p>The company has independent business operation capabilities and a complete operating system, and is independent from the controlling shareholder in terms of business, personnel, assets, organization and finance.</p> <p>The board of directors, board of supervisors and internal organizations operate independently according to their rules of procedure or company systems. The company's controlling shareholders can strictly regulate their own behavior, and through the general meeting of shareholders</p> <p>The law exercised its rights and assumed obligations, and did not directly or indirectly interfere with the company's business activities beyond the general meeting of shareholders.</p> <p>During the reporting period, there was no non-operational occupation of the company's funds by the controlling shareholder.</p> <p>3. Directors and Board of Directors</p> <p>The board of directors is the decision-making body of the company. The company's board of directors consists of 11 directors, of whom 7 are non-independent directors and 4 are independent directors. The company's board of directors</p> <p>The structure of the board of directors is reasonable, and the qualifications, selection procedures and composition of directors are in compliance with the requirements of relevant laws and regulations. All directors can attend the board of directors with a serious and responsible attitude</p> <p>and the general meeting of shareholders, proceeding from the interests of the company and all shareholders, faithfully perform their duties, actively participate in relevant training, study relevant laws and regulations, and promote the regulation of the board of directors</p> <p>Operation and scientific decision-making. The board meeting procedures complied with the regulations, the meeting minutes were complete and authentic, and the relevant information of the meeting was disclosed in a timely, accurate and sufficient manner.</p> <p>4. Supervisors and the Board of Supervisors</p> <p>The company's board of supervisors consists of 3 members, including 2 shareholders representing supervisors and 1 employee representing supervisors. Employee representative supervisors are elected by employees of the company through democratic elections</p> <p>out. The structure of the company's board of supervisors is reasonable, and the qualifications, selection procedures and composition of supervisors are in compliance with the requirements of relevant laws and regulations. The company strictly follows the "company</p> <p>The number and composition of the board of supervisors of the company meet the requirements of laws and regulations. Supervisors can earnestly</p> <p>Study relevant laws and regulations, actively participate in relevant business training, earnestly perform duties, and in the spirit of being responsible to all shareholders, especially small and medium shareholders, to the company's major</p> <p>Issues, related transactions, financial status, as well as the legality and compliance of directors and other senior management personnel to perform their duties, supervise and issue independent opinions, and safeguard the legitimate rights and interests of the company and shareholders.</p> <p>Whether there is any significant difference between the actual situation of corporate governance and the laws, administrative regulations and regulations on the governance of listed companies issued by the China Securities Regulatory Commission</p> <p>YesNo</p> <p>There is no significant difference between the actual situation of corporate governance and the laws, administrative regulations and regulations on the governance of listed companies issued by the China Securities Regulatory Commission.</p>
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2. The company's independence from the controlling shareholder and actual controller in guaranteeing the company's assets, personnel, finance, organization, business, etc.

The company has established a sound corporate governance structure. The company is completely separated from the controlling shareholder in terms of business, personnel, assets, organization, finance, etc., and has independent Establish a complete business and independent management capabilities. All the company's production and operation or major events are submitted according to the authorized authority in accordance with the "Articles of Association" and related systems.

The management, the board of directors and the general meeting of shareholders discuss and determine.

(1) Business

The company has an independent and complete business system and independent management capabilities, and there is no need to rely on shareholders and other related parties for business activities. company The controlling shareholder issued a commitment to avoid horizontal competition, promising not to directly or indirectly engage in any business that constitutes horizontal competition with the company.

(2) Personnel

The company has established an independent human resource management department. After each business department proposes a personnel demand plan, the human resource department will independently conduct recruitment management. management personnel and employees; the company's production and operation management department, procurement and sales department, personnel and other institutions are independent, and there is no department related to the controlling shareholder and its personnel Duplication of staff positions. Senior management personnel such as the general manager, deputy general manager, financial controller and secretary of the board of directors of the company all receive remuneration from the company.

(3) Assets

The company has a complete production system, industrial property rights, non-patented technology, and trademarks independent of the controlling shareholder. Asset property rights between the company and shareholders are clearly defined. The controlling shareholders and related parties do not have illegal occupation of funds, assets and other resources of listed companies.

(4) Financial aspects

The company has set up an independent financial department, which is responsible for the company's financial accounting business, and strictly implements the "Enterprise Accounting Standards" and "Enterprise Accounting System". established an independent Establish a standardized financial accounting system and a complete accounting system, with clear internal division of labor, separation of approval, execution and recording responsibilities, independent bank accounts, and independent The use of the company's funds is independently decided within the scope of authorization in accordance with the provisions of the "Articles of Association" and related systems, and there is no shareholder unit intervening in the use of the company's funds. Use the situation.

3. Competition in the same industry

Applicable Not applicable

4. Relevant information on the annual general meeting and extraordinary general meeting held during the reporting period

1. The general meeting of shareholders during the reporting period

Session	Meeting Type	Investor Participation Ratio	Date of Meeting	disclosure date	Meeting Resolutions
2022 First Extraordinary General Meeting of Shareholders	EGM	40.56%	April 13, 2022	April 13, 2022	Resolutions of the 1st Extraordinary General Meeting of Shareholders in 2022
2021 Annual General Meeting	Annual General Meeting	40.55%	May 12, 2022	May 12, 2022	Resolutions of the 2021 Annual General Meeting of
2022 Second Extraordinary General Meeting of Shareholders	EGM	36.08%	July 14, 2022	July 14, 2022	Shareholders Resolutions of the Second Extraordinary General Meeting
The Third Extraordinary General Meeting of Shareholders in 2022	EGM	35.82%	August 30, 2022	August 30, 2022	of Shareholders in 2022 Resolutions of the Third Extraordinary General Meeting
The Fourth Extraordinary General Meeting of Shareholders in 2022	EGM	35.91%	October 25, 2022	October 25, 2022	of Shareholders in 2022 Resolutions of the Fourth Extraordinary General Meeting of Shareholders in 2022

2. Preference shareholders whose voting rights have been restored request to convene an extraordinary general meeting

ÿApplicableÿNot applicable

5. The company has different arrangements for voting rights

ÿApplicableÿNot applicable

6. Corporate Governance of Red Chip Structure

ÿApplicableÿNot applicable

7. Directors, Supervisors and Senior Management

1. Basic information

name	job	Employment status	gender	age	Term start date	term end date	Number of shares held at the beginning of the period (shares)	Number of shares increased in the current period (shares)	Number of shares reduced in the current period (shares)	Other changes (shares)	Number of shares held at the end of the period (shares)	Reasons for increase or decrease of shares
Zhang Pengcheng	chairman	current	male	56	July 21, 2021	September 25, 2023						
Zhou Congwen	Managing Director	current	male	50	2023 March 17th, 2023 April 03	September 25						
Director Liu Lei	is currently male			56	2010 October 27	2023 September 25	24,325,991				24,325,991	
Director Wang Teng	is currently male			35	2022 May 12 Jul 14,	2023						
Congratulations to the current male director				36	2022	September 25, 2023 September 25						
Wang Li's current female director				40	2020	2023 September 25 September 25						
Zhang Rui	Director, Secretary of the Board	current	male	39	2023 February 3rd	2023 September 25						

	Book											
Tan Xiangyang is independent director	director	current male		53	2017 September 26	2023 September 25						
Zuo Shiyang	independent director	current male		53	2020 September 25	2023 September 25						
Liu Lingli	independent director	Current female		58	2020 September 25	2023 September 25						
Zhang Wenwu	independent director	current male		41	2020	2023						
Sun Lihua	Supervisor Chairman of the	current female		51	September 25, 2020	September 25, 2023						
Du Wei, Supervisor, current male				55	2010 October 27	2023 September 25						
Ma Fang	employee supervisor	Current female		39	2022 March 04	2023 September 25						
Zhao Wentao	Deputy General Manager	current male		41	2021 July 02	2023 September 25						
Sun Yanhong	Vice President Manager, Chief Financial Officer	Current female		55	March 25, 2016	September 25, 2023	841,8 04				841,8 04	
Vice President Yu Dongqiang	Deputy General Manager	current male		52	2020 January 17	2023 September 25						
Wu Yongtao	Deputy General Manager	current male		53	2022 December 30	2023 September 25	139,3 44				139,3 44	
Hu Kun	Deputy General Manager	current male		42	2022	2023						
Vice President Kong Deqiang	Deputy General Manager	current male		37	December 30, 2022	September 25, 2023	4,000				4,000	
Xu Xu	employee supervisor	outgoing male		39	2020 September 25	2022 March 04						

					Day	Day						
Bian Jiangrong	female director			44	2020 September 25	2022 March 24						
Gao Zhiqiang	Deputy General Manager	outgoing male		48	2020 January 17	2022 April 01						
Gao Zhiqiang	Director resigned male			48	2020 February 11	2022 April 24						
Director Meng Qiang leaves office		male		38	2022 April 13 June	2022 June 24th						
Director Liang Jian resigned male				48	28, 2018	August 9th 2022						
Zhao Wentao	Director resigned male			41	2022 August 30th	2023 January 13						
Cao Huafeng	Deputy General Manager, Secretary of the Board of Directors	outgoing male		52	2010 October 27	2023 February 3rd	1,264 ,033				1,264 ,033	
Li Lin	Vice Chairman	outgoing male		62	2017	2023 March 14,						
Li Lin	General manager	outgoing male		62		2023 March 17 September 26 September 26, 2017						
total--							26,57 5,172	0	0		26,57 5,172	

Whether there were any resignation of directors and supervisors and dismissal of senior executives during the reporting period

Yes No

1. Mr. Xu Xu, the employee representative supervisor of the company, resigned from the position of the employee representative supervisor of the fifth session of the board of supervisors on March 4, 2022 due to personal reasons.
any position held by the company.

2. Ms. Bian Jiangrong, a non-independent director of the company, resigned from the position of director of the fifth board of directors on March 24, 2022 due to personal reasons, and will not hold any position in the company after her resignation.
what job.

3. Mr. Gao Zhiqiang, director and deputy general manager of the company, resigned from the position of executive deputy general manager on April 1, 2022 due to work adjustments, and has resigned on April 24, 2022
Resign from the position of director and will not hold any position in the company after resignation.

4. Mr. Meng Qiang, a non-independent director of the company, resigned from the position of director of the fifth board of directors on June 24, 2022 due to work adjustments, and will not serve in the company after resignation
any job.

5. Mr. Liang Jian, a non-independent director of the company, resigned from the position of director of the fifth board of directors on August 9, 2022 due to personal reasons, and will not hold any position in the company after his resignation.
duty.

6. Mr. Zhao Wentao, director and executive deputy general manager of the company, resigned from the position of director of the fifth board of directors on January 13, 2023 due to personal reasons.

The company serves as the executive deputy general manager.

7. Mr. Cao Huafeng, deputy general manager and secretary of the board of directors of the company, resigned from the position of deputy general manager and secretary of the board of directors on February 03, 2023, and will not be in the company after resignation.

hold any position.

8. Mr. Li Lin, vice chairman and general manager of the company, resigned from the position of general manager on March 17, 2023 due to personal reasons, and resigned from the fifth position on March 14, 2023.

After resigning, he still holds other positions in the company.

Changes in Directors, Supervisors and Senior Management of the Company

ÿ Applicable ÿ Not applicable

Name	Position held	type	Date reason March 4, 2022	Voluntary resignation March
Xu Xu	Employee	resignation	24, 2022 Voluntary resignation April 1, 2022	Dismissal April 24,
Bian Jiangrong	Supervisor	resignation	2022 Work change June 24, 2022 Work adjustment August 9,	
Gao Zhiqiang	Director Executive Deputy	dismissal	2022 Voluntary resignation 2023 Work adjustment on	
Gao Zhiqiang	General	resignation	January 13, 2019	
Meng	Manager	resignation		
Qiang	Director	resignation		
Liang Jian Zhao Wentao	Director	resignation		
Cao Huafeng	Director Deputy General Manager and	fired	Voluntary resignation on February 3, 2023	
Li Lin Li	Board Secretary	Dismissal	Voluntary resignation on March 14, 2023	Voluntary resignation on
Lin	Vice Chairman General Manager		March 17, 2023	

2. Employment status

The company's current directors, supervisors, and senior management personnel's professional background, main work experience, and current main responsibilities in the company

(1) Brief introduction of board members

1. Zhang Pengcheng, male, born in December 1967, Chinese nationality, no right of permanent residence abroad, bachelor's degree, senior engineer, successively served as Beijing Urban Construction Tianning Consumer Branch Manager of Fang Co., Ltd., Chairman and General Manager of Beijing Urban Construction Tianning Hongrun Electromechanical Equipment Co., Ltd., Vice President of Beijing New Phoenix Real Estate Company Manager, Vice Chairman and Deputy General Manager of Tibet Nuodikang Pharmaceutical Co., Ltd., Chairman and General Manager of Beijing Kangmei Xingnong Investment Co., Ltd. Available from July 2021 Chairman of the company. Concurrently serves as chairman of Shandong Sanju Bioenergy Co., Ltd., director of Beijing Zhongrong Baiwang Real Estate Co., Ltd., and director of Fuda Zijin Hydrogen Energy Technology Co., Ltd. company director.

2. Zhou Congwen, male, born in August 1973, Chinese nationality, no right of permanent residence abroad, bachelor degree, member of the Communist Party of China, senior engineer. 1996 From August to March 2023, he worked in Sinopec Tianjin Petrochemical Company, China Shenhua Coal-to-oil Chemical Co., Ltd. Coal-to-oil Plant, China Shenhua Coal Oil Chemical Co., Ltd. Ordos Coal-to-Liquid Branch Company, China Shenhua Coal-to-Liquid Chemical Co., Ltd. Xinjiang Coal Chemical Branch Company, Liaoning Datang International Fuxin Coal-to-Liquid Natural Gas LLC. He will serve as the general manager of the company from March 2023 and a director of the company from April 2023.

3. Liu Lei, male, born in June 1967, Chinese nationality, no right of abode abroad, university degree. Director of the company from June 2000 to July 2021 He will serve as director of the company from July 2021. Incumbent Beijing Daxing Foundation Technology Development Co., Ltd., Beijing Daxing Foundation Business Management Co., Ltd., Shenzhen Guoxing Chairman of Keda Investment Management Co., Ltd.; Executive Director of Hebei Brilliance Petrochemical Co., Ltd. and Sanya Guoxing Keda Industry Investment Development Co., Ltd.; Jubei Dahuang Biomass New Material Co., Ltd., Beijing Hongtai Jiye Business Management Co., Ltd., Beijing Yiyang Asset Management Co., Ltd., Beijing Huashi United Energy Technology Co., Ltd. Director of Technology Development Co., Ltd.; Vice Chairman and General Manager of Beijing Haidian Technology Development Co., Ltd.

4. Wang Teng, male, born in May 1988, Chinese nationality, no right of abode abroad, master of business administration, holds Chinese Certified Public Accountants (CICPA), National Home Legal Professional Qualification Certificate. From October 2011 to December 2021, worked as a senior auditor in the Audit Department of PricewaterhouseCoopers Zhongtian Certified Public Accountants Beijing Branch Audit Manager, Audit Manager of Audit Department of Minmetals International Trust Co., Ltd., Senior Investment Manager of Investment Department of Beijing Capital Venture Capital Co., Ltd., Gaoji (Tianjin) Investment Co., Ltd. Investment Manager of the Company's Investment Development Department, Deputy Manager of the Strategic Investment Department of Beijing Haidian District State-owned Assets Investment Management Co., Ltd. Manager of the Strategic Investment Department of Haidian District State-owned Assets Investment and Operation Co., Ltd., the general manager of Beijing Haidian District State-owned Assets Investment and Operation Co., Ltd. Assistant to the manager (and manager of the strategic investment department). Concurrently serves as director of Heilongjiang Haiguolongyou Petrochemical Co., Ltd., director of Beijing Graphene Research Institute Co., Ltd., Beijing Executive director and general manager of Jinghai Xinzhi Low Carbon Technology Development Co., Ltd., director of Beijing Zhongguancun Zhongji Intellectual Property Service Group Co., Ltd., Beijing Haidian International Education

Director of Yu Investment Co., Ltd., director of Beijing Xintai Energy Co., Ltd., director of Jiangxia Xintai (Beijing) Private Equity Fund Management Co., Ltd., Beijing Huahai Hengtai

Executive Director of Investment Management Co., Ltd., Chairman and General Manager of Beijing Haiguo Xintai Capital Holdings Co., Ltd., Beijing Haixinyu Urban Renewal Construction and Development Co., Ltd.

director. He will serve as a director of the company from May 2022.

5. Congratulations, male, born in April 1987, Chinese nationality, member of the Communist Party of China, no right of abode abroad, master degree, economist, accountant title,

Holds securities practitioner qualification certificate, futures practitioner qualification certificate and PMP certificate. Worked in Jilin International Storage Co., Ltd., China Jilin International Cooperation

(Stock) Co., Ltd., Beijing Haidian District State-owned Assets Investment and Operation Co., Ltd. Comprehensive Management Department, Strategic Investment Department, Operation Management Department, etc.; June 2022

So far, he has served as the manager of the operation and management department of Beijing Haidian District State-owned Assets Investment Management Co., Ltd. Concurrently serves as director of Beijing Daoxianghu Investment Development Co., Ltd.

Director of Beijing Haidian Science and Technology Park Construction Co., Ltd., Director of Beijing Xintai Century Real Estate Investment Co., Ltd., Beijing Green and Isolated Area Infrastructure Development and Construction Co., Ltd.

Co., Ltd., director of China Technology Exchange Co., Ltd., director of Beijing Longhui International Wine Culture and Creative Industry Co., Ltd., Beijing Haixin Hengtai Trading Co., Ltd.

Director, director of Beijing Zhongguancun Zhongji Intellectual Property Service Group Co., Ltd., director of Beijing Haiguo Property Management Co., Ltd. In charge of the company from July 2022

director.

6. Wang Li, female, born in November 1983, Chinese nationality, no right of abode abroad, bachelor degree. From July 2017 to now, he has served as the state-owned asset manager of Haidian District, Beijing

Manager of Risk Legal Department of Investment Management Co., Ltd. He used to be the senior legal manager of Zhongji Intellectual Property Fund Management Co., Ltd. Concurrently serving as Beijing Jinkaixuan Taxi Co., Ltd.

Co., Ltd., Supervisor of Beijing Zhongji Commercial Factoring Co., Ltd., Supervisor of Beijing Haiguo Hengtai Enterprise Management Service Co., Ltd., Beijing Huahai Hengtai Investment Management Co., Ltd.

Supervisor of the company, supervisor of Beijing Haiguo Hengtai Early Childhood Education Technology Co., Ltd., supervisor of Beijing Jinhui Conference Co., Ltd., supervisor of Beijing Haixin Hengtai Trading Co., Ltd.,

Supervisor of Beijing Hailing Enterprise Management Development Co., Ltd., supervisor of Beijing Haixing Technology Industry Service Co., Ltd., supervisor of Haixin Hengtai (Shandong) Fuel Co., Ltd., Beijing

Supervisor of Jingxintai Jinxu Investment Co., Ltd., supervisor of Beijing Haiguo Investment Consulting Service Co., Ltd., supervisor of Beijing Haixinyu Urban Renewal Construction Development Co., Ltd., Jiang

Chairman of the Board of Supervisors of Xiaxintai (Beijing) Private Equity Fund Management Co., Ltd., Supervisor of Beijing Starfish Enterprise Service Co., Ltd., Supervisor of Zhongchuang Haitai (Beijing) Capital Management Co., Ltd., Director of Heilongjiang Haiguo

Longyou Petrochemical Co., Ltd. Served as a director of the company since September 2020.

7. Zhang Rui, male, born in May 1984, Chinese nationality, no permanent residence abroad, bachelor degree. Served from September 2007 to August 2022

In Beijing Zhuangxun Investment Consulting Co., Ltd., Beijing Oran Investment Management Co., Ltd., Beijing Ledu Investment Co., Ltd., Beijing Ledu Private Equity Fund Management Co., Ltd.

Company, Beijing Haidian District State-owned Assets Investment and Operation Co., Ltd., will serve as the assistant to the general manager of the company from September 2022, and serve as the non-independent director of the company from February 2023

affairs, secretary of the board of directors.

8. Tan Xiangyang, male, born in February 1970, Chinese nationality, master's degree, senior British certified public accountant (FFA), senior Australian public

Accountant (FIPA), Chartered Global Management Accountant (CGMA), senior British Chartered Management Accountant (FCMA). Served as general manager of Beijing Schenck Engineering Design Co., Ltd., deputy general manager of Schenck (Tianjin) Industrial

Technology Co., Ltd., Beijing Clyde Material Transportation Technology Co., Ltd., Schenck (Tianjin) Industrial Technology Co., Ltd.

Chief Financial Officer of Technology Co., Ltd., Beijing Schenck Engineering Design Co., Ltd., Schenck (Hong Kong) Industrial Technology Co., Ltd., Shenyang Stok Electric Power Equipment Co., Ltd.

Director of Beijing Clyde Material Transportation Technology Co., Ltd., financial director of China Huanqiu Engineering Co., Ltd., member of the Economic Management Office of the Foreign Economic Cooperation Center of the Ministry of Agriculture,

CFO of Samson Control Equipment (China) Co., Ltd., Senior Vice President of Beijing Caineng Technology Co., Ltd. Since September 2017, he has been an independent director of the company. Current Beijing

Executive Director and General Manager of Shudao Management Consulting Co., Ltd.

9. Zuo Shiyang, male, born in January 1970, Chinese nationality, member of the Communist Party of China, postgraduate degree, graduated from East China University of Science and Technology in Materials Science and Engineering

Industry. He used to be the head of the product technology department of North Huajin Chemical Industry Group Co., Ltd., the polyolefin technical service manager of Shanghai Secco Petrochemical Co., Ltd., and the director of Dow Corning China Investment Co., Ltd.

He is the marketing manager of the company, the product director of Herosos Water Purification Technology Co., Ltd., and the deputy general manager of Yangzhou Hydrometallurgy Technology Co., Ltd. Mainly engaged in the chemical industry. incumbent

Executive director of Wuxue Juan Chemical Co., Ltd., deputy general manager of Beijing Odyssey Chemical Co., Ltd. Since September 2020, he has served as an independent director of the company.

10. Liu Lingli, female, born in June 1965, Chinese nationality, graduate degree, graduated from East China University of Science and Technology (East China Institute of Chemical Technology), majoring in organic chemical engineering. He used to be the

deputy director of the Refining Department of the Sinopec Planning Institute, the deputy chief engineer of the Sinopec Economic and Technological Research Institute, and a senior expert of the group company, mainly engaged in the energy industry.

do. Since September 2020, he has served as an independent director of the company.

11. Zhang Wenwu, male, born in October 1982, Chinese nationality, master's degree, bachelor's degree in law from Zhongnan University of Economics and Law, economic management from Tsinghua University

Master of Business Administration from the Faculty of Science. Served as a partner of Beijing Kaiwen Law Firm, a partner of Beijing Guofeng Kaiwen Law Firm, and a partner of Guangdong Silver Jubilee Technology Co., Ltd.

Deputy general manager of the company, deputy general manager of Xingke Electronic Technology Co., Ltd., independent director of Beijing Zhongtuo Video Culture Media Co., Ltd. Mainly engaged in investment management

do. He is currently a senior partner of Beijing Haihoutai Capital Management Co., Ltd., an executive director and general manager of Shenzhen Honeycomb Factory Investment Co., Ltd. Served from September 2020

Independent director of the company.

(2) Brief introduction of members of the board of supervisors

1. Sun Lihua, female, born in February 1972, Chinese nationality, no right of abode abroad, bachelor degree. Worked in Beijing Haidian District State-owned Assets Investment Management

Manager of the internal audit department of the limited company. Concurrently serving as supervisor of Beijing Haidian District State-owned Assets Investment Group Co., Ltd., Beijing Haidian District State-owned Assets Investment Management Co., Ltd.

Supervisor of the company, chairman of the board of supervisors of Beijing Xintai Century Real Estate Investment Co., Ltd., supervisor of Beijing Zhongguancun Zhongji Intellectual Property Service Group Co., Ltd., Beijing Zhixiang Travel

Chairman of the Board of Supervisors of Science and Technology Development Co., Ltd., Chairman of the Board of Supervisors of Beijing Xintai Energy Co., Ltd., Supervisor of Jingmeng Sugar (Inner Mongolia) Co., Ltd.,

Supervisor of Dian District Steel Pipe Factory Co., Ltd., supervisor of Beijing Guoke Pioneering Innovation Technology Co., Ltd., chairman of the supervisory board of Beijing Longhui International Wine Culture and Creative Industry Co., Ltd.,

Supervisor of Beijing Haixinzhi Low Carbon Technology Development Co., Ltd., supervisor of Tangshan Caofeldian Haiguo Jingtai Energy Co., Ltd., supervisor of Beijing Haidian District Yicai Technology Co., Ltd.

Director, Supervisor of Beijing Haixinsheng Industrial Co., Ltd., Chairman of the Board of Supervisors of Beijing Daoxianghu Investment Development Co., Ltd., and Beijing Kaiwen Dexin Education Technology Co., Ltd.

Chairman of the Board of Supervisors. Since September 2020, he has served as the chairman of the company's supervisory board.

2. Du Wei, male, born in January 1968, Chinese nationality, no right of abode abroad, bachelor degree. Worked in China Aviation Remote Sensing Service Company, Beijing

Assistant to the general manager of Jingdahang Foundation Business Management Co., Ltd., Beijing North Shukang Biotechnology Co., Ltd., and Beijing Haidian Technology Development Co., Ltd. October 2007

From September 2017 to September 2020, he served as the chairman of the company's board of supervisors. Currently, Executive Director and General Manager of Beijing Shengde Hengtong Technology Co., Ltd.

Executive director and general manager of Beijing Rongqiang Weiye Technology Development Co., Ltd. Served as a supervisor of the company since September 2020.

3. Ma Fang, female, born in October 1984, Chinese nationality, member of the Communist Party of China, master of material chemical engineering. Worked in Process Engineering Research of Chinese Academy of Sciences

Institute, joined the company in November 2011, and has successively served as the research director of the company's technology development department, the assistant to the general manager of the subsidiary and concurrently the director of the operation management department, etc., and is currently the company's technology director.

Deputy Minister of Development, mainly responsible for scientific research management of the Ministry of Science and Technology Development. He concurrently serves as the assistant to the general manager of Beijing Sanju Lvyan Co., Ltd. and the head of the operation and management department.

Assistant to the general manager and head of the operation and management department of Juluening Technology Co., Ltd., director and general manager of Zhejiang Jujin Biomass Technology Co., Ltd., Jiyuan City Sanju Lvyan Biotechnology Co., Ltd.

Chairman of Quality New Material Co., Ltd., executive director and general manager of Henan Sanju Lvyan Biomass New Material Technology Co., Ltd., Suzhou Sanju Lvyan Biomass New Material Technology Co., Ltd.

General Manager of Materials Co., Ltd. From March 2022, he will serve as the employee representative supervisor of the company.

(3) Brief introduction of senior management personnel

1. Zhou Congwen, general manager, same resume as above.

2. Zhao Wentao, male, born in July 1982, Chinese nationality, no permanent residence abroad, doctoral candidate, member of the Communist Party of China, senior engineer. Year 2009

Joined the company in July, and served as engineer, deputy director, and director of the company's technology development department. From July 2021, he will serve as the company's deputy general manager. From April 2022, he will serve as executive

Deputy General Manager. Concurrently serves as director of Fujian Sanju Fuda Chemical Fertilizer Catalyst National Engineering Research Center Co., Ltd., director of Shandong Sanju Bioenergy Co., Ltd., Inner Mongolia Mei

Director of Fangmei Coking Co., Ltd., director of Wuhan Jinzhong Engineering Technology Co., Ltd. Mr. Zhao Wentao has been engaged in technology research and development and foreign technology cooperation for a long time.

It is the backbone of the company's catalyst research and development. He has won honors such as the Capital Labor Medal and the National May 1st Labor Medal. China Petroleum and Chemical Industry

He won the first prize of the Science and Technology Progress Award of the Industry Federation twice, applied for 80 patents, and published more than ten industry papers.

3. Sun Yanhong, female, born in October 1968, Chinese nationality, no permanent residence abroad, bachelor degree, accountant. Former Beijing Tianniaoyiheshu

Financial Manager of Control Equipment Co., Ltd., Deputy General Manager and Chief Financial Officer of Beijing Hedamei Intelligent CNC Equipment Co., Ltd. Joined the company in January 2012 as the company's finance

Deputy Minister of the Ministry of Finance, has served as the head of the company's finance department since May 2014, served as the company's chief financial officer since March 2016, and concurrently served as the company's deputy general manager since September 2017.

4. Yu Dongming, male, born in November 1971, Chinese nationality, no permanent residence abroad, bachelor degree, member of the Communist Party of China, senior engineer, international

Certified Senior Project Manager (PMP). Worked in Sinopec Wuhan Branch, Sinochem Quanzhou Petrochemical Co., Ltd. in September 2010

From March to March 2017, he served successively as the head of the refining business department, the deputy director of the project execution center, and the head of the technology development department in Beijing Petrochemical Engineering Co., Ltd. 2017 3

He joined the company in July and served as the project manager of the Hebi project team and the director of the investment project management department. Since January 2020, he has been the deputy general manager of the company. Part-time Shandong Sanju Bioenergy Co., Ltd.

Director of Co., Ltd., executive director of Beijing Sanju Energy Purification Engineering Co., Ltd., director of Wuhan Jinzhong Engineering Technology Co., Ltd.

5. Wu Yongtao, male, born in May 1970, Chinese nationality, member of the Communist Party of China, no right of abode abroad, doctoral degree, engineer title. Served

Worked in PetroChina Fushun Petrochemical Catalyst Plant, joined the company in April 2002, served as the engineer of the company's technical department and the head of the production department, and the deputy general manager of the company's first branch

and general manager, deputy general manager of Shenyang Sanju Kate Catalyst Co., Ltd., assistant to the general manager of the company and head of the technology development department, assistant to the general manager and head of the production management department

He is also the director of the quality inspection center, the director of the company's production safety and environmental protection department, and the assistant to the general manager. He is currently the deputy general manager of the company. Concurrently serving as Sichuan Xinda New Energy Technology Co., Ltd.

Judicial representative and chairman, supervisor of Suzhou Hengsheng New Material Co., Ltd., general manager of Beijing Sanju Energy Purification Engineering Co., Ltd.

6. Hu Kun, male, born in November 1981, Chinese nationality, no right of abode abroad, master degree. From July 2006 to March 2021 Served

In Fenghuangcheng Real Estate Development Group, Huifu Hengtai (Beijing) Fund Management Co., Ltd., Dihai Investment Holding Group, Zhongguancun Maker Town (Beijing) Technology Co., Ltd.

Co., Ltd., Beijing Chuangke Town Real Estate Co., Ltd., joined the company in April 2022, served as the assistant to the general manager of the company, and is currently the deputy general manager of the company.

7. Kong Deliang, male, born in July 1986, Chinese nationality, member of the Communist Party of China, no right of abode abroad, bachelor degree. Worked in Shandong Haik Chemical Group Co., Ltd., joined the company in August 2012, served as the technical assistant of the company's gas purification business department, and the engineering procurement department of Beijing Sanju Energy Purification Engineering Co., Ltd. Director, Technical Support Engineer of Marketing Department, Deputy Director of Bioenergy Marketing Department, Legal Representative and General Manager of Shandong Sanju Bioenergy Co., Ltd., General Manager of the company Assistant to management, currently the deputy general manager of the company and concurrently the chairman of Inner Mongolia Meifang Coal Coking Co., Ltd.

8. Zhang Rui, secretary of the board of directors, same resume as above.

Employment status in shareholder units

✓ Applicable ✗ Not applicable

Name of employee	Name of shareholder unit	Positions held in shareholder units Assistant to	Term start date	Term end date	Whether to receive remuneration and allowances in shareholder units
Wang Teng	Beijing Haidian District State-owned Assets Investment and Operation Co.,	the general manager (and manager of the strategic investment department)			yes
Wang Teng	Ltd. Beijing Haixinzhi Low Carbon Technology	Executive Director and General Manager			no
congratulate	Development Co., Ltd. Beijing Haidian District State-owned Assets Investment	Operations Manager			yes
Wang Li	and Operation Co., Ltd. Beijing Haidian District State-owned Assets Investment	Risk legal department manager			yes
Sun Lihua	and Operation Co., Ltd. Beijing Haidian District State-owned Assets Investment	Internal Audit Manager			yes
Sun Lihua	and Operation Co., Ltd. Beijing Haixinzhi Low Carbon Technology Development Co., Ltd.	Supervisor			no
Explanation of the position in the shareholder unit	none				

Employment in other units

✓ Applicable ✗ Not applicable

The name of the person in charge	Other unit names	Positions held in other units	Term start date	Term end date	Whether to receive remuneration allowance in other units
Zhang Pengcheng	Shandong Sanju Bioenergy Co., Ltd. Beijing	chairman			no
Zhang Pengcheng	Zhongrong Baiwang Real Estate Co., Ltd. Fuda	director			no
Zhang Pengcheng	Zijin Hydrogen Energy Technology Co., Ltd. Beijing	director			no
Liu Lei	Daxing Foundation Technology Development Co., Ltd. Beijing	chairman			no
Liu Lei	Daxing Foundation Business Management Co., Ltd.	chairman			no
Liu Lei	Shenzhen Guoxing Keda Investment Management Co., Ltd.	chairman			no
Liu Lei	Hebei Brilliance Petrochemical Co., Ltd. Director of	executive Director			no
Liu Lei	Sanya Guoxing Keda Industry Investment Development Co., Ltd.	executive Director			no
Liu Lei	Heilongjiang Sanju Peking University				no

	Wasteland Biomass New Materials Co.,				
Liu Lei	Ltd. Beijing Hongtai Foundation Business	director			no
Liu Lei	Management Co., Ltd. Beijing Yiyang	director			no
Liu Lei	Assets Management Co., Ltd. Beijing Huashi United Energy	director			no
Liu Lei	Technology Development Co., Ltd. Beijing	Vice Chairman, General Manager			yes
Wang Teng	Haidian Technology Development Co., Ltd.	director			no
Wang Teng	Heilongjiang Haiguo Longyou	director			no
Wang Teng	Petrochemical Co., Ltd. Beijing Graphene Research Institute Co., Ltd.	director			no
Wang Teng	Company Beijing Zhongguancun China	director			no
Wang Teng	Technology Intellectual Property Service	director			no
Wang Teng	Group Co., Ltd. Beijing Haidian International Education	director			no
Wang Teng	Investment Co., Ltd. Beijing Xintai Energy Co., Ltd.	executive Director			no
Wang Teng	Jiangxia Xintai (Beijing) Private Equity Fund	Chairman and General Manager			no
Wang Teng	Management Co., Ltd. Beijing Huahai Hengtai Investment	director			no
congratulate	Management Co., Ltd. Beijing Haiguo Xintai Capital	director			no
congratulate	Holding Co., Ltd. Beijing Haixinyu Urban Renewal	director			no
congratulate	Construction Development Co., Ltd. Beijing Daoxianghu	director			no
congratulate	Investment and Development Co., Ltd. Beijing Haidian Science and Technology	director			no
congratulate	Park Construction Co., Ltd. Beijing Xintai	director			no
congratulate	Century Real Estate Investment Co., Ltd. Beijing Green and	director			no
congratulate	Isolated Area Infrastructure Development and	director			no
congratulate	Construction Co., Ltd. China Technology Exchange Co., Ltd. Beijing Longhui	director			no
congratulate	International Wine Culture and Creative Industry	director			no
Wang Li	Co., Ltd. Beijing Haixin Hengtai Trading Co., Ltd. Beijing Zhongguancun Zhongji Intellectual Property Service Group Co., Ltd. Beijing Haiguo Property Management Co., Ltd. Beijing Jinkaixuan is a supervi				

	Rent a Car Co., Ltd. Beijing				
Wang Li	Zhongji Commercial Factoring Co., Ltd. Beijing	Supervisor			no
Wang Li	Haiguo Hengtai Enterprise Management Service Co., Ltd. Beijing	Supervisor			no
Wang Li	Huawai Hengtai Investment Management Co., Ltd. Beijing	Supervisor			no
Wang Li	Haiguo Hengtai Early Childhood Education Technology Co., Ltd. Beijing	Supervisor			no
Wang Li	Jinhui Conference Co., Ltd. Beijing	Supervisor			no
Wang Li	Haixin Hengtai Trading Co., Ltd. Beijing Hailing	Supervisor			no
Wang Li	Enterprise Management Development Co., Ltd. Beijing	Supervisor			no
Wang Li	Starfish Technology Industry Service Co., Ltd. Haixin Hengtai	Supervisor			no
Wang Li	(Shandong) Fuel Co., Ltd. Beijing Xintai Jinxiu Investment	Supervisor			no
Wang Li	Co., Ltd. Beijing Haiguo Investment Consulting	Supervisor			no
Wang Li	Service Co., Ltd. Beijing Haixinyu Urban Renewal	Supervisor			no
Wang Li	Construction Development Co., Ltd. Jiangxia Xintai (Beijing) Private	Supervisor			no
Wang Li	Equity Fund Management Co., Ltd. Beijing Haixing Business Enterprise	Chairman of the Supervisory Board			no
Wang Li	Service Co., Ltd. Zhongchuang Haitai (Beijing) Capital	Supervisor			no
Wang Li	Management Co., Ltd. Heilongjiang Haiguo Longyou	Supervisor			no
Wang Li	Petrochemical Co., Ltd. Beijing Shudao Management Consulting Co., Ltd.	director			no
Tan Xiangyang	Company Wuxue Jiuai Chemical Co., Ltd.	Executive Director and General Manager			yes
Zuo Shiyang	Beijing Odyssey Chemical Co., Ltd. Shenzhen	executive Director			no
Zuo Shiyang	Honeycomb Factory Investment Co., Ltd. Beijing	Deputy General Manager			yes
Zhang Wenwu	Haihoutai Capital Management Co., Ltd. Beijing	Executive Director and General Manager			no
Zhang Wenwu	Haidian District State-owned Assets Investment Group	Senior Partner			yes
Sun Lihua	Co., Ltd. Beijing Haidian District State-owned Assets Investment Management Co.,	Supervisor			no
Sun Lihua	Ltd. Beijing Xintai Century Zhi Chairman of the Board of Supervisors	Supervisor			no
Sun Lihua					no

	Industry Investment Co.,				
Sun Lihua	Ltd. Beijing Zhongguancun Zhongji Intellectual Property Service	Supervisor			no
Sun Lihua	Group Co., Ltd. Beijing Zhixiang Travel Technology	Chairman of the Supervisory Board			no
Sun Lihua	Development Co., Ltd. Beijing Xintai	Chairman of the Supervisory Board			no
Sun Lihua	Energy Co., Ltd. Jingmeng Sugar Industry (Inner	Supervisor			no
Sun Lihua	Mongolia) Co., Ltd. Beijing Haidian District Steel	Supervisor			no
Sun Lihua	Pipe Factory Co., Ltd. Innovation Technology	Supervisor			no
Sun Lihua	Co., Ltd. Beijing Longhui International Wine Culture and	Chairman of the Supervisory Board			no
Sun Lihua	Creative Industry Co., Ltd. Tangshan Caofeidian	Supervisor			no
Sun Lihua	Haiguo Jingtai Energy Co., Ltd. Beijing Haidian	Supervisor			no
Sun Lihua	District Yicai Technology Co., Ltd.	Supervisor			no
Sun Lihua	Beijing Haixinsheng Industrial Co., Ltd. Beijing	Chairman of the Supervisory Board			no
Sun Lihua	Daoxianghu Investment Development Co., Ltd. Beijing	Chairman of the Supervisory Board			no
Du Wei	Kai Wendexin Education Technology Co.,	Executive Director and General Manager			no
Du Wei	Ltd. Beijing Shengde Hengtong Technology	Executive Director and General Manager			no
Ma Fang	Co., Ltd. Beijing Rongqiang Weiye	Assistant to General Manager and Head of the Operations Management			no
Ma Fang	Technology Development Co., Ltd. Beijing	Department Assistant to the General Manager and Head of the Operations Management Department			no
Ma Fang	Sanju Green Source Co., Ltd. Beijing Sanju	Managing Director			no
Ma Fang	Green Energy Technology Co., Ltd. Zhejiang Jujin Biomass	chairman			no
Ma Fang	Technology Co., Ltd. Jiyuan City Sanju Green Source Biomass	Executive Director, General Manager			no
Ma Fang	New Material Co., Ltd. Henan Sanju Lvyuan Biomass	General manager			no
Zhao Wentao	New Material Technology Co., Ltd. Suzhou Sanju Lvyuan Biomass New Material	director			no
Zhao Wentao	Co., Ltd. Fujian Sanju Fuda Chemical	director			no
Zhao Wentao	Fertilizer Catalyst National Engineering Research Center Co., Ltd. Shandong Sanju Bioenergy Co., Ltd. Inner Mongolia Meifang Coal Coking Co., Ltd.	director			no

Zhao Wentao	Wuhan Jinzhong Engineering Technology Co., Ltd.	director			no
Yu Dongming	Shandong Sanju Bioenergy Co., Ltd. Beijing Sanju	director			no
Yu Dongming	Energy Purification Engineering Co., Ltd. Wuhan Jinzhong	executive Director			no
Yu Dongming	Engineering Technology Co., Ltd. Sichuan Xinda New	director			no
Wu Yongtao	Energy Technology Co., Ltd. Suzhou Hengsheng New	Legal representative and chairman			no
Wu Yongtao	Materials Co., Ltd. Beijing Sanju Energy Purification	Supervisor			no
Wu Yongtao	Project Co., Ltd. Inner Mongolia Meifang Coal Coking Co., Ltd.	General manager			no
Kong Deliang		chairman			no
Description of employment in other units	none				

Punishments of the company's current and resigned directors, supervisors and senior executives during the reporting period in the past three years by securities regulatory agencies

ÿApplicableÿNot applicable

3. Remuneration of directors, supervisors and senior executives

Decision-making procedures, determination basis and actual payment of remuneration for directors, supervisors and senior executives

(1) Decision-making procedures

1. The non-independent directors serving in the fifth session of the board of directors shall be implemented in accordance with the "Non-independent Directors' Remuneration Plan" reviewed and approved by the second extraordinary general meeting in 2022.

The independent directors serving in the fifth session of the board of directors shall follow the "Proposal on Amending the Independent Directors' Allowance System of the Company" approved by the first extraordinary general meeting in 2021.

"Proposal", and the supervisors serving in the fifth session of the board of supervisors shall follow the "Proposal on Adjusting the Allowances of Directors and Supervisors of the Company" approved by the third extraordinary general meeting of shareholders in 2017

Case" implementation;

2. According to the thirty-ninth meeting of the fifth session of the board of directors, the company's senior management reviewed and approved the "Senior Management Personnel Term System Contractual Management and Salary Performance

Assessment System", the annual remuneration of the company's senior management consists of two parts: basic remuneration and year-end target performance bonus.

The standard performance bonus is based on the company's annual operating performance and production and operation development status, considering factors such as job responsibilities and work performance, and is authorized by the company's board of directors to propose

Issued after review and approval by the Name and Salary Appraisal Committee.

(2) Determination basis

1. Senior executives who concurrently serve as directors in the company did not receive director allowances in the company. According to the thirty-ninth meeting of the fifth board of directors of the company, the "Senior Management Personnel Term

System Contractual Management and Salary Performance Evaluation System", the annual salary of the company's senior management personnel consists of two parts: basic salary and year-end target performance bonus

Composition, in which the basic salary is paid on a monthly basis, and the year-end target performance bonus is based on the company's annual operating performance and production and operation development status, taking into account job responsibilities and work activities

The board of directors authorizes the nomination and salary appraisal committee of the company's board of directors to issue after review and approval;

2. The employee supervisors of the company do not receive supervisor allowances in the company, and receive corresponding remuneration according to their positions in the company;

3. The independent director's allowance for the fifth session of the board of directors shall be in accordance with the "About Amending the Company's Independent Director's Allowance" approved by the first extraordinary general meeting of shareholders in 2021

"Proposal" on Sticker System" is implemented;

4. Directors of the fifth session of the board of directors who do not serve in the company shall implement the "Remuneration Plan for Non-independent Directors" reviewed and approved by the second extraordinary general meeting in 2022.

The Bank and the supervisors of the fifth session of the board of supervisors shall follow the "Proposal on Adjusting the Allowances of Directors and Supervisors of the Company" reviewed and approved at the third extraordinary shareholders' meeting in 2017.

(3) Actual payment status

During the reporting period, the company's directors, supervisors and senior management personnel (including the resigned personnel of the fifth board of directors and the board of supervisors, and senior management personnel) received a total of

The salary of the company is 9.9937 million yuan; the basic salary of senior management personnel is paid on a monthly basis, and the allowances of directors (including independent directors) and supervisors are paid quarterly.

Remuneration of directors, supervisors and senior executives of the company during the reporting period

Unit: ten thousand yuan

Name	position	gender	age	Employment status	Total pre-tax remuneration	Whether to receive remuneration from related parties of the company
Zhang Pengcheng	Chairman Male Director, General		56	Current	received from	
Zhou Congwen	Manager Male Director Male		50	Current	the	
Liu Lei	Director Male Director Male		56	Current	company	
Wang	Director Female Director, Board		35	Current	119.61	
Teng	Secretary Independent Director		36	Current	Yes 0	
congratulates Wang Li	Male Independent Director Male		40	Current	No 0 Yes 0 Yes 0 Yes 0	
Zhang Rui	Independent Director Female	male	39	current	11.84 no	
Tan	Independent Director Male		53	current53	9 No 9	
Xiangyang	Supervisor Chairman Female		current58		No 9 No	
Zuo Shiyang	Supervisor Male Employee		current41		9 No 0	
Liu Lingli	Supervisor Female Executive		current51		Yes 6	
Zhang	Deputy General Manager Male		current55		Yes	
Wenwu	Deputy General Manager, Finance		current39		24.65	
Sun	Director, deputy general manager,		current41		No 109.23 No	
Lihua Du Wei Ma Fang Zhao Wentao	male, deputy general manager,		current			
Sun Yanhong	male, deputy general manager,	female	55	current	107.31 no	
Yu Dongming	male, deputy general manager,		52	current53	107.26 No 73.60	
Wu Yongtao	male employee supervisor, male		current42		No 34.15 No	
Hu Kun	director, female director, male		current37		41.17 No 8.22	
Kong Daliang	director, male director, male		current39		No 0 Yes 0	
Xu Xu	deputy general manager, board		outgoing44		Yes 77.17	
Bian Jiang	secretary, director, vice chairman		outgoing48		No 0 Yes	
Rong	and general manager		outgoing48			
Liang Jian			outgoing38			
Gao Zhiqiang Meng Qiang			outgoing			
Cao Huafeng		male	52	leaving	107.43 no	
Zhao Wentao		male	41	leaving	0 no	
Li Lin		male	62	resignation	135.73 no	
total					999.37	

8. Performance of duties by directors during the reporting period

1. The situation of the board of directors during the reporting period

Session of the	Date	disclosure date	Resolutions of
twenty-fourth meeting of the fifth board of directors The	January 04, 2022	January 04, 2022	the 24th meeting of the fifth board of directors Resolutions
twenty-fifth meeting of the fifth board of directors The	March 28, 2022	March 29, 2022	of the 25th meeting of the fifth board of directors Resolutions
twenty-sixth meeting of the fifth board of directors The	April 08, 2022	April 08, 2022	of the 26th meeting of the fifth board of directors Resolutions
twenty-seventh meeting of the fifth board of directors The	April 21, 2022	April 22, 2022	of the 27th meeting of the fifth board of directors Resolutions
twentieth meeting of the fifth board of directors	April 27, 2022	April 27, 2022	of the fifth board of directors Resolutions of the twenty-
Eighth meeting Twenty-ninth meeting of the fifth board of directors	May 31, 2022	May 31, 2022	eight meeting Resolutions of the twenty-ninth meeting of the fifth board of directors

The Thirtieth Meeting of the Fifth Board of Directors June 28, 2022		June 29, 2022	Resolutions of the 30th meeting of the fifth board of directors
The thirty-first meeting of the fifth board of directors The	July 18, 2022	July 20, 2022	Resolutions of the 31st meeting of the fifth board of directors
thirty-second meeting of the fifth board of directors The	August 12, 2022	August 13, 2022	Resolutions of the 32nd meeting of the fifth board of directors
thirty-third meeting of the fifth board of directors The thirty-	August 29, 2022	August 30, 2022	Resolutions of the 33rd meeting of the fifth board of directors
fourth meeting of the fifth board of directors The thirty-fifth	September 23, 2022	September 24, 2022	Resolutions of the 30th meeting of the fifth board of directors Four
meeting of the fifth board of directors The thirty-sixth	September 30, 2022	September 30, 2022	meeting resolutions Resolutions of the 35th meeting of the fifth board
meeting of the fifth board of directors The thirty-seventh	October 14, 2022	October 14, 2022	of directors Resolutions of the 36th meeting of the fifth board of
meeting of the fifth board of directors The thirty-eighth	October 27, 2022	October 28, 2022	directors Resolutions of the thirty-ninth meeting of the Board of
meeting of the fifth board of directors The thirty-ninth	December 16, 2022	December 16, 2022	Directors
meeting of the fifth board of directors	December 30, 2022	December 30, 2022	

2. Attendance of directors at board meetings and general meetings of shareholders

Attendance of Directors at Board Meetings and Shareholders' Meetings							
director name	The number of board meetings that should be attended in this reporting period	Number of board meetings attended on site	Number of board meetings attended by correspondence	Number of board meetings entrusted	Number of absences from board meetings	Did you fail to attend two board meetings in person in a row?	Attendance at shareholders' meetings
Zhang	16	15	1	0	0 No 0	No 0	5
Pengcheng	16	15	1	0	No 0	No 0	5
Li Lin Liu	16	15	1	0	No 0	No 0	5
Lei Wang	11	10	1	0	No 0	No 0	3
Teng	9	9	0	0	No 0	No 0	2
	16	15	1	0	No		5
	0	0	0	0			0
congratulates	16	15	1	0			5
Wang Li Zhang	16	15	1	0			5
Rui Tan	16	15	1	0			5
Xiangyang Zuo Shiyang Liu Lingli Zhang Wenwu	16	15	1	0			5

Explanation for failing to attend the board meeting in person for two consecutive times

none

3. The situation where the directors raise objections to the relevant matters of the company

Whether the directors raise objections to the relevant matters of the company

YesNo

During the reporting period, the directors raised no objection to the relevant matters of the company.

4. Other instructions on the performance of duties by directors

Whether the directors' suggestions to the company are adopted

Yes No

Explanation by the directors on whether the relevant proposals of the company are adopted or not adopted

During the reporting period, the independent directors of the company strictly complied with the "Company Law", "Securities Law", "Shenzhen Stock Exchange GEM Stock Listing Rules" and other laws and regulations and normative documents, combined with the specific provisions of the "Articles of Association" and the company's "Working System for Independent Directors", actively attend the company's board of directors, attend shareholders' general meeting earnestly performed the duties of independent directors, made scientific and prudent decisions, and put forward reasonable opinions and suggestions on the company's management and standardized operations. At the same time, actively communicate with other directors, supervisors and the company's management, grasp the company's development trends, effectively ensure the fairness and objectivity of the board of directors' decisions, and effectively maintain the company's overall interests and the legitimate rights and interests of the majority of small and medium investors.

IX. The special committees under the board of directors during the reporting period

Committee Name Membership		Number of meetings held	Date and content of the meeting		Important comments and suggestions put forward	Other situations in which duties are performed	Specific circumstances of the objection (if any)
Nomination and Remuneration Appraisal Committee of the Board of Directors	Zhang Wenwu (Independent Director), Liu Lingli (Independent Director), Zuo Shiyang (Independent Director), Tan Xiangyang (Independent Director),	7	March 25, 2022	Proposal on the resignation of the company's non-independent directors and by-election of non-independent directors			
Nomination and Remuneration Appraisal Committee of the Board of Directors	Director), Zhang Pengcheng Zhang Wenwu (Independent Director), Liu Lingli (Independent Director), Zuo Shiyang (Independent Director), Tan Xiangyang (Independent Director),	7	April 04, 2022	Proposal on the Appointment of the Executive Deputy General Manager of the Company			
Nomination and Remuneration Appraisal Committee of the Board of Directors	Director), Zhang Pengcheng Zhang Wenwu (Independent Director), Liu Lingli (Independent Director), Zuo Shiyang (Independent Director), Tan Xiangyang (Independent Director),	7	April 24, 2022	Proposal on the resignation of the company's non-independent directors and by-election of non-independent directors			
Nomination and Remuneration Appraisal Committee of the Board of Directors	Zhang Pengcheng, Meng Qiang Zhang Wenwu (Independent Director), Liu Lingli (Independent Director) director), Zuo Shiyang (independent director), Tan	7	June 10, 2022	Proposal on the 2021 annual incentive salary of the senior management team			
Nomination and Remuneration Appraisal Committee of the Board of Directors	Xiangyang (independent director), Zhang Pengcheng, Meng Qiang, Zhang Wenwu (independent director), Liu Lingli (independent director),	7	June 27, 2022	Regarding the resignation of the company's non-independent directors and the by-election of non-independent directors			

	Zuo Shiyang (Independent Director), Tan Xiangyang (Independent			motion			
Nomination and Remuneration Appraisal Committee of the Board of Directors	Director), Zhang Pengcheng Zhang Wenwu (Independent Director), Liu Lingli (Independent Director), Zuo Shiyang (Independent Director), Tan Xiangyang (Independent Director), Zhang Pengcheng, Congratulations	7	August 10, 2022	Proposal on the resignation of the company's non-independent directors and by-election of non-independent directors			
Nomination and Remuneration Appraisal Committee of the Board of Directors	Zhang Wenwu (Independent Director), Liu Lingli (Independent Director), Zuo Shiyang (Independent Director), Tan Xiangyang (Independent Director), Zhang Pengcheng, Congratulations	7	December 28, 2022	Proposal on Amending the <Senior Managers' Salary Management and Performance Appraisal System>, Proposal on the Appointment of the Company's Deputy General Manager, Proposal on the Appointment of the Company's Deputy			
Audit Committee of the Board of Directors	Tan Xiangyang (independent director), Zhang Wenwu (independent director), Zuo Shiyang (independent director), Wang Li	4	April 11, 2022	General Manager, Proposal on the Appointment of the Company's Deputy General Manager Final Accounts Report, Proposal on Re-appointment of Audit Institution for 2022, Audit Department's 2021 Work Summary, 2022 Work Plan, Special Report on Deposit and Use of Raised Funds in 2021, 2021 Internal Control Self-evaluation Report, 2021 Controlling Shareholders and Others Occupation of funds by related parties, the proposal on the inspection report of major events in 2021, the financial			
Audit Committee of the Board of Directors	Tan Xiangyang (independent director),	4	April 18, 2022	report for the first quarter of 2022			

	Zhang Wenwu (independent director), Zuo Shiyang (independent director), Wang Li, Meng Qiang			Table, special report on raised funds in the first quarter of 2022, work summary of the audit department in the first quarter of 2022, second quarter work			
Audit Committee of the Board of Directors	Tan Xiangyang (independent director), Zhang Wenwu (independent director), Zuo Shiyang (independent director), Wang Li, congratulations	4	August 26, 2022	plan on the 2022 semi-annual financial report, special report on the deposit and use of raised funds in the first half of 2022, audit department 2022 Work summary for the first half of 2022, work plan for the second half of 2022, capital occupation of controlling shareholders and other related parties in the first half of 2022, inspection report on major events in the first half of			
Audit Committee of the Board of Directors	Tan Xiangyang (independent director), Zhang Wenwu (independent director), Zuo Shiyang (independent	4	October 21, 2022	2022, financial report for the third quarter of 2022, work of the audit department for the third quarter of 2022 Summary, work plan for the fourth quarter			
Board Strategy Committee	director), Wang Li, congratulations Zhang Pengcheng, Li Lin, Wang Teng, Wang Li, Zhao Wentao, Liu Lingli (independent	1	September 20, 2022	Haixinneng's strategic development plan for the next 5 years (2022-2026)			
Board Technical Committee	director), Zuo Shiyang (independent director) Directors) Li Lin, Zhang Pengcheng, Wang Teng, Zhao Wentao, Liu Lingli (independent directors), Zuo Shiyang (independent directors)	1	November 16, 2022	Proposal on upgrading the quality of Shandong Sanju's 400,000 tons/year bioenergy products			

X. Work of the Supervisory Committee

Whether the board of supervisors found any risks in the company during the supervision activities during the reporting period

Yes/No

The Supervisory Committee had no objection to the supervisory matters during the reporting period.

Eleven, the company's employees

1. Number of employees, professional composition and education level

Number of active employees of the parent company at the end of the reporting period (person)	223
Number of active employees of major subsidiaries at the end of the reporting period (person)	2,757
Total number of active employees at the end of the reporting period (person)	2,980
Total number of employees receiving salaries in the current period (person)	3,500
Number of retired employees (persons) whose parent company and major subsidiaries need to bear the expenses	24
professional composition	
Major Constituent Category	The number of professional constituents (person)
Production staff	1,824
salesperson	142
technical personnel	452
financial personnel	118
administration staff	444
total	2,980
education level	
Education level category	Quantity (person)
Doctorate and above	10
Master's degree	110
Bachelor's degree	573
Total of	709
college degree and below	1,578
	2,980

2. Remuneration Policy

The company implements the salary policy of equal pay for equal work and easy salary for changing jobs; the company implements the salary payment principle of paying employees for their positions, abilities, and performance. company Establish a complete salary system and performance appraisal system. The salary system is established based on the post system, providing different salary increase channels for employees of different post systems. According to the Tao, the salary system is subdivided into management, research and development, technology, sales, project management and construction, production, etc. Each year the company will carry out the corresponding market Conduct field surveys on salary levels, and adjust the company's overall salary levels in a timely manner.

The salary system includes a salary system and a welfare system. The salary system includes the basic annual salary and the annual reward determined according to the performance appraisal system. Welfare system includes Social security provident fund and other benefits provided by the company, including supplementary medical insurance, company training and team building, etc.

With the development of the company, the company will adjust the salary policy in a timely manner to make the company's salary level more competitive in order to attract and retain excellent employees.

3. Training plan

The company formulates training plans on an annual basis according to the company's development needs in that year. The company formulates training programs based on the principle of focusing on internal training and supplementing external training and learning. training plan. The company has established a corresponding training system. Internal training is mainly aimed at company system training, business knowledge training, corporate culture training, etc. External training The training is mainly aimed at professional knowledge training such as strategic management and finance.

4. Labor outsourcing

Applicable Not applicable

The total number of working hours of labor outsourcing (hours)	221,478.72
Total remuneration paid for labor outsourcing (yuan)	6,518,046.97

XII. The company's profit distribution and capitalization of capital reserves

Profit distribution policy during the reporting period, especially the formulation, implementation or adjustment of the cash dividend policy

Applicable Not applicable

During the reporting period, the company complied with the "Company Law", "Guidelines for the Supervision of Listed Companies No.

According to the relevant provisions of the "Notice on Matters Concerning Cash Dividend Distribution" and the "Articles of Association", the company's 2021 annual profit distribution plan has been formulated. Company on April 21, 2022

The twenty-ninth meeting of the fifth session of the board of directors was held on May 12, 2022, and the 2021 annual general meeting of shareholders reviewed and approved the "About 2021 Annual Profit

Proposal on Distribution and Capitalization of Capital Reserves into Share Capital Plan", based on the company's total share capital of 2,349,720,302 shares as of December 31, 2021, a cash dividend of RMB 0.05 (tax included) will be distributed to all shareholders for every 10 shares, and a total of 11,748,601.51 cash dividends will be distributed Yuan (tax included), no bonus shares, no capital stock

Convert accumulated funds into share capital. The company's cash dividend policy complies with the provisions of the "Articles of Association" and the requirements of the general meeting of shareholders. The dividend standards and proportions are clear and clear.

The procedures and mechanisms are complete, independent directors can fulfill their duties and play their due roles, and small and medium shareholders have the opportunity to fully express their opinions and appeals, fully safeguarding the Dong's legitimate rights and interests.

Special Notes on Cash Dividend Policy	
Whether it complies with the provisions of the company's articles of association or the requirements of the resolutions of the general meeting of shareholders:	yes
Whether the dividend standard and proportion are clear and clear:	yes
Whether the relevant decision-making procedures and mechanisms are	yes
complete: Whether the independent directors have performed their duties and played their due roles:	yes
Whether small and medium shareholders have the opportunity to fully express their opinions and appeals, and whether their legitimate rights and interests have been fully protected:	yes
If the cash dividend policy is adjusted or changed, whether the conditions and procedures are compliant and transparent:	not applicable

The company's profit distribution plan for the reporting period and the plan for converting capital reserves into share capital are consistent with the relevant provisions of the company's articles of association and dividend management measures

Yes No Not applicable

The company's profit distribution plan and capital reserve conversion plan for the reporting period are in compliance with the relevant provisions of the company's articles of association.

This year's profit distribution and capitalization of capital reserves Number of bonus

shares for every 10 shares (shares)	0
Dividend per 10 shares (yuan) (tax included)	0
Number of conversions per 10 shares (shares)	0
Share capital basis of distribution plan (shares)	2,349,720,302
Cash dividend amount (yuan) (tax included)	0.00
Amount of cash dividends in other ways (such as share repurchase) (yuan)	0.00
Total cash dividends (including other methods) (yuan)	0.00
Distributable profit (yuan)	3,067,891,186.57
Proportion of total cash dividends (including other methods) to total profit distribution	0.00%
The current cash dividend	
other	
The detailed description of the profit distribution or capital reserve conversion plan has been	
audited by Reanda Certified Public Accountants (Special General Partnership).	

The profit is -804,432,900 yuan, of which the net profit of the parent company is -190,052,200 yuan, and the distributable profit of the parent company at the end of 2022 is 3,067,891,200 yuan. In comprehensive consideration of the external environment and the actual situation of the company's current development, in order to improve the company's financial stability, ensure the company's cash needs for future business development, and better safeguard the long-term interests of all shareholders, the board of directors has carefully studied and decided on the company's 2022 annual profit distribution and The preplan for converting capital reserves into share capital is as follows: no cash dividends, no bonus shares, and no conversion of capital reserves into share capital. The retained undistributed profits of the company are accumulated and rolled over to the next year.

The company made a profit during the reporting period and the parent company's profit available to shareholders was positive, but no cash dividend distribution plan was proposed

ÿApplicableÿNot applicable

XIII. Implementation of the company's equity incentive plan, employee stock ownership plan or other employee incentive measures

ÿApplicableÿNot applicable The

company had no equity incentive plan, employee stock ownership plan or other employee incentive measures and their implementation during the reporting period.

XIV. Construction and implementation of internal control system during the reporting period

1. Construction and implementation of internal control

According to the requirements of the "Basic Standards for Enterprise Internal Control" and its supporting guidelines, under the leadership of the board of directors, the company specially established an internal control system construction leader in 2018.

Leading group, employing professional consulting agencies, organized and built a sound internal control system through careful sorting out of various business links, and formed the "Internal Control Manual"

"Manual", which contains the company's important risks and key control processes. Since the internal control manual was put into operation, the company has reviewed the relevant systems and

The process is revised and adjusted in a timely manner to ensure the standard and orderly operation of various tasks and minimize or avoid risks.

During the reporting period, according to the "Securities Law of the People's Republic of China", "Shenzhen Stock Exchange GEM Stock Listing Rules", "Shenzhen Stock Exchange Listing

Company Self-Regulatory Guidelines No. 2—Standardized Operation of GEM Listed Companies" and other relevant laws, regulations, and normative documents, combined with the actual situation of the company,

"Company Articles of Association", "Remuneration Plan for Non-Independent Directors", "Senior Management Salary Management and Performance Appraisal System", "Employee Attendance and Leave Management Measures (Trial)", "Business Plan

Management System (Trial)", "Official Use Vehicle Management Measures (Trial Implementation)", "Official Document Management Measures (Trial Implementation)", "Environmental Protection Management Measures

Management System Compilation", "Special Environmental Protection Management System", production and safety-related systems, etc. were revised; at the same time, the "Senior Management Personnel Salary Plan",

"Annual Comprehensive Assessment Management Rules", "Information Work Management Measures", "Company Legal Affairs Control System (Trial)", "Productive Fixed Assets Management Office

Law (Provisional)", "Reasonable Collection of Long-term Accounts Receivable and Disputed Accounts Receivable Management Measures", etc. The company carried out unified publicity and implementation of the internal control norms and regulations,

Effective feedback has been obtained, which has enhanced the compliance management awareness of all employees and effectively improved the company's standardized operation level.

During the reporting period, the company's audit department organized and carried out the internal control matters of the company in 2022 with reference to various internal control systems and the procedures of the "Internal Control Manual".

The supervision and evaluation work covers the main business links and business matters to ensure the effective implementation of internal control. According to the identification of major deficiencies in the company's internal control

Moreover, on the base date of the internal control evaluation report, the company has not found any major defects in the internal control of financial reporting and non-financial reporting.

2. Details of the major deficiencies in internal control discovered during the reporting period

ÿYesÿNo

XV. The company's management and control over subsidiaries during the reporting period

Company Name	Integration	Plan Integration Progress	Problems Encountered in Integration	The resolution measures taken are	Solution Progress	Subsequent Solution Plan
none		not applicable	not applicable	Not Applicable	not applicable	not applicable

16. Internal control self-assessment report or internal control audit report

1. Internal control self-assessment report

Disclosure date of the full text of the internal control evaluation report	April 7, 2023 For details, please refer to	
Disclosure index of the full text of the internal control evaluation report	the "2022 Internal Control Self-evaluation Report" published by the company on April 7, 2023 on www.cninfo.com.cn.	
The ratio of the total assets of the units included in the evaluation scope to the total assets of the company's consolidated financial statements	100.00%	
The ratio of the operating income of units included in the evaluation scope to the operating income of the company's consolidated financial statements	100.00%	
Defect identification standard		
category	The qualitative	non-financial reporting
Qualitative standard	<p>criteria for the evaluation of financial reporting internal control deficiencies determined by the financial reporting company are as follows: Signs of major financial reporting deficiencies include: (1) fraudulent behavior by the company's directors, supervisors and senior managers; (2) the company's correction of the published financial report; (3) Significant misstatements in the current financial report discovered by certified public accountants but not identified by the company's internal control; (4) The audit committee and the audit department's supervision of the company's external financial report and internal control of financial report is invalid. Signs of important deficiencies in financial reporting include: (1) failure to select and apply accounting policies in accordance with generally accepted accounting principles; (2) failure to establish anti-fraud procedures and controls; (3) failure to establish appropriate accounting treatment for unusual or special transactions (4) There are one or more deficiencies in the control of the financial reporting process at the end of the period and it cannot reasonably guarantee that the prepared financial statements will achieve the true and accurate goals. General deficiencies refer to control deficiencies other than the above-mentioned major deficiencies and important deficiencies.</p>	<p>The identification of non-financial report defects is mainly based on the possibility of the occurrence of defects and the degree of impact on the effectiveness of business processes. The following signs usually indicate that there may be major deficiencies in the internal control of non-financial reporting: (1) The decision-making procedures of key businesses lead to major decision-making mistakes; (2) Serious violations of national laws and regulations; (3) Middle and senior managers or personnel in key technical positions Serious loss; (4) The major or important defects found in the internal control evaluation have not been rectified; (5) Other circumstances that have a significant negative impact on the company.</p> <p>The following signs usually indicate that there may be important deficiencies in the internal control of non-financial reporting: (1) The decision-making procedures of key businesses lead to general mistakes; (2) There are defects in important business systems or systems; (3) There is a serious loss of business personnel in key positions; (4)) Other situations that have a relatively large negative impact on the company. General deficiencies: other control deficiencies other than major and important deficiencies.</p>
quantitative standard	<p>The quantitative standards for the evaluation of internal control defects in financial reports determined by the company take main business income and total assets as measurement indicators. The quantitative standards for internal control defects in financial reports with main business income as the measurement index are as follows: error amount $\geq 2\%$ of the total main business income, 1% of the total main business income \geq error amount $< 2\%$ of main business income , error amount $< 1\%$ of total main business revenue; the quantitative standards for internal control defects in financial reporting with total assets as a measure are as follows: error amount $\geq 1\%$ of total assets, 0.5% of total assets \geq error amount $< 1\%$ of the total assets, the amount of error $< 0.5\%$ of the total assets.</p>	<p>The quantitative standards for the evaluation of non-financial reporting internal control defects determined by the company take main business income and total assets as measurement indicators. Quantitative standards for non-financial reporting internal control deficiencies measured by operating income are as follows: Amount of error or loss $\geq 2\%$ of total main business income, 1% of total main business income \geq Error or loss amount $< 2\%$ of the total amount of errors or losses $< 1\%$ of the total revenue of the main business; the quantitative standards for non-financial reporting internal control defects using the total assets as a measure are as follows: the amount of errors or losses $\geq 1\%$ of the total assets, 1% of the total assets 0.5% \geq error or loss amount $< 1\%$ of total assets, error or loss amount $< 0.5\%$ of total assets</p> <p>0.5%</p>
Number of major deficiencies in financial reports (pieces)	0	
Number of significant deficiencies in non-financial reports (pieces)	0	
Number of important deficiencies in financial reports (pieces)	0	
Number of important deficiencies in non-financial reporting (pieces)	0	

2. Internal control audit report or assurance report

Internal Control Assurance Report

Deliberative opinion paragraph in internal control assurance report	
<p>We performed the assurance business in accordance with the "Chinese Certified Public Accountants Other Assurance Business Standard No. 3101 - Assurance Business Other than Auditing or Review of Historical Financial Information" and referring to the "Guiding Opinions on Internal Control Review". The above provisions require us to plan and execute the assurance work to obtain reasonable assurance that the information subject to assurance is free from material misstatement. During the assurance process, we have implemented including understanding, testing and evaluating the establishment and implementation of the internal control system, as well as other procedures we deem necessary. We believe that our assurance work provides a reasonable basis for our opinion. Internal controls have inherent limitations, and there is the possibility that misstatements, due to errors or fraud, can occur and go undetected. In addition, because changes in circumstances may cause internal control to become inappropriate, or reduce the degree of compliance with control policies and procedures, the effective internal control on December 31, 2022 does not guarantee that it will be effective in the future, according to It is risky to predict the effectiveness of internal control in the future based on the evaluation results of internal control. In our opinion, Haixinnengke maintained effective internal controls related to financial statements in all material respects as of December 31, 2022. Disclosure of Internal Control Assurance Report</p>	
	Show off
Disclosure date of the full text of the internal control assurance report	April 7, 2023 For details, please
Disclosure Index for Full Text of Internal Control Assurance Report	refer to the "2022 Internal Control Assurance Report" published by the company on April 7, 2023 on Juchao.com. standard unqualified opinion
Whether there are major defects in the non-	
financial report of the type of internal control assurance report opinion	no

Does the accounting firm issue an internal control assurance report with non-standard opinions

ÿYesÿNo

Whether the internal control assurance report issued by the accounting firm is consistent with the self-evaluation report of the board of directors

ÿYes ÿNo

17. Rectification of listed company governance special action self-inspection issues

none.

Section 5 Environmental and Social Responsibility

1. Major environmental issues

Whether the listed company and its subsidiaries belong to the key pollutant discharge units announced by the environmental protection department

Yes No

Environmental protection related policies and industry standards

Our company strictly abides by the Environmental Protection Law of the People's Republic of China, the Law of the People's Republic of China on the Prevention and Control of Air Pollution, the Law of the People's Republic of China on the Prevention and Control of Water Pollution, etc.

There are a total of 62 laws and regulations related to environmental protection, and the comprehensive discharge standard of air pollutants GB16297-1996 and the comprehensive discharge standard of sewage GB8978-

1996, ambient air quality standard GB3095-2012 and other industry standards related to environmental protection totaled 18 items.

Environmental Protection Administrative Licensing

(1) Shenyang Sanju Kate Catalyst Co., Ltd.

The existing four projects of Phase I, Phase II, Phase III, and technical transformation of chemical fertilizers have all undergone environmental impact assessment, completed filing, obtained environmental impact assessment approval, and all passed the inspection

In strict accordance with the requirements of ISO14001, the company has improved the internal management level of the enterprise, established and operated the environmental management system, passed and obtained the environmental management system

department certification.

(2) Daqing Sanju Energy Purification Co., Ltd.

The styrene extraction unit, the neopentyl glycol unit, the additional torch and the incinerator system have all completed the environmental impact assessment and obtained approval documents, and all passed the acceptance.

(3) Shandong Sanju Bioenergy Co., Ltd.

Shandong Sanju Bioenergy Co., Ltd.'s 400,000-ton/year bioenergy project has undergone environmental impact assessment, completed filing, and obtained environmental impact assessment approval.

(4) Sichuan Xinda New Energy Technology Co., Ltd.

The existing new 50,000-ton/year polyoxymethylene dimethyl ether projects have all undergone environmental impact assessment, completed filing, obtained environmental assessment approval, and all passed the acceptance. company

In strict accordance with the requirements of ISO14001, the internal management level of the enterprise has been improved, the environmental management system has been established and operated, and the environmental management system certification has been passed and obtained.

(5) Inner Mongolia Sanju Jiajing New Energy Co., Ltd.

The existing comprehensive utilization of coke oven gas to produce 200 million m³ liquefied natural gas project and the comprehensive utilization of LNG tail gas to produce 100Kt/a synthetic ammonia project have all undergone environmental impact assessment

price, completed the filing, obtained the environmental impact assessment approval, and all passed the acceptance; the company strictly followed the requirements of ISO14001 to improve the internal management level of the enterprise, establish and operate

Implemented the environmental management system, passed and obtained the environmental management system certification.

(6) Inner Mongolia Meifang Coal Coking Co., Ltd.

The existing comprehensive utilization of 3 million tons/year of coal washing and 2x960,000 tons/year of coking have all undergone environmental impact assessment, completed filing, obtained environmental assessment approval, and all passed

Acceptance; the company strictly follows the requirements of ISO14001, improves the internal management level of the enterprise, establishes and operates the environmental management system, and passes and obtains the environmental management certificate

System Certification.

Industry discharge standards and the specific situation of pollutant discharge involved in production and operation activities

Company or Subsidiary Name	Types of main pollutants and characteristic pollutants	Names of main pollutants and characteristic pollutants	Emission method	Number of outlets	Distribution of outlets	Emission concentration/intensity	Pollutant Emission Standards Executed	total emissions	Approved Total Emissions	Excessive emissions
Shenyang Tripolymer Kate Catalyst	Exhaust dust		organized emissions	1	Molecular sieve post- treatment workshop	35.33mg/m3	(GB162 97- 1996	0.2448t /a	3.35/a no	

limited company					dust collector		Class II, 200mg/m ³			
Shenyang Sanju Kate Catalyst Co., Ltd.	Exhaust dust		organized emissions	1	Molecular sieve synthesis workshop	50mg/m ³	(GB16297 - 1996) Class II, 200mg/m ³	0.48t/a 3.35t/a	None	
Shenyang Sanju Kate Catalyst Co., Ltd.	exhaust gas	Nitrogen oxides	organized emissions	1	Workshop 1 roasting furnace (42m)	126.6mg/m ³	(GB16297 - 1996) Class II, 240mg/m ³	0.1728t/a	8.823t/a	none
Shenyang Sanju Kate Catalyst Co., Ltd.	Exhaust soot		organized emissions	1	Workshop 1 roasting furnace (42m)	0.01mg/m	(GB16297 - 1996) Class II, 200mg/m ³	0.0288t/a	2.19t/a no	
Shenyang Sanju Kate Catalyst Co., Ltd.	exhaust gas	Nitrogen oxides	organized emissions	1	Workshop 1 roasting furnace (32m)	33.33mg/m ³	(GB16297 - 1996) Class II, 240mg/m ³	0.23 t/a	8.823t/a	none
Shenyang Sanju Kate Catalyst Co., Ltd.	Exhaust soot		organized emissions	1	Workshop 1 roasting furnace (32m)	25.33mg/m ³	(GB16297 - 1996) Class II, 200mg/m ³	0.1728t/a	2.19t/a no	
Shenyang Trimeric Catalyst Co., Ltd.	Exhaust dust		organized emissions	1	No. 1 dust collector in workshop 1	32.3mg/m ³	GB9078 - 1996 200mg/m ³	0.288t/a	3.35t/a no	
Shenyang Trimeric Catalyst Co., Ltd.	Exhaust dust		organized emissions	1	No. 2 Dust Collector in Workshop 1	45.33mg/m ³	GB9078 - 1996 200mg/m ³	0.67t/a 3.35t/a	None	
Shenyang Trimeric Catalyst Co., Ltd.	Exhaust soot		organized emissions	1	Monohydric iron roasting kiln	27mg/m ³	GB9078 - 1996 200mg/m ³	0.0576t/a	2.19t/a no	
Shenyang Trimeric Catalyst Co., Ltd.	exhaust gas	Nitrogen oxides	organized emissions	1	Monohydric iron roasting kiln	156mg/m ³	GB9078 - 1996 240mg/m ³	0.66t/a	8.823t/a	none
	Exhaust soot		organized emissions	1	Molecular sieve post-treatment heat conduction oil furnace	72mg/m ³	GB9078 - 1996 200mg/m ³	0.0288t/a	2.19t/a no	

							3			
Shenyang Sanju Catalyst Co., Ltd.	exhaust gas	sulfur dioxide	organized emissions	1	Molecular sieve post-treatment heat conduction oil furnace	67mg/m ³	GB9078 - 1996 850mg/m ³	0.0288t/a	3.38t/a no	
Shenyang Sanju Catalyst Co., Ltd.	exhaust gas	Nitrogen oxides	organized emissions	1	Molecular sieve post-treatment heat conduction oil furnace	104mg/m ³	GB9078 - 1996 240mg/m ³	0.0288t/a	8.823t/a	none
Shenyang Sanju Catalyst Co., Ltd.	Exhaust soot		organized emissions	1	Three-phase absorption tower	21mg/m ³	GB9078 - 1996 200mg/m ³	0.0864t/a	2.19t/a no	
Shenyang Sanju Catalyst Co., Ltd.	exhaust gas	Nitrogen oxides	organized emissions	1	Three-phase absorption tower	8.667mg/m ³	GB9078 - 1996 200mg/m ³	0.0576t/a	8.823t/a	none
Shenyang Sanju Kate Catalyst Co., Ltd.	Exhaust dust		organized emissions	1	High-capacity sulfur powder post-treatment dust collector	43.67mg/m ³	(GB16297 - 1996) Class II, 120mg/m ³	0.54t/a 3.35t/a	None	
Shenyang Sanju Kate Catalyst Co., Ltd.	Exhaust dust		organized emissions	1	High-capacity sulfur powder post-processing workshop dust collector	48mg/m ³	(GB16297 - 1996) Class II, 120mg/m ³	0.216t/a	3.35t/a no	
Shenyang Sanju Kate Catalyst Co., Ltd.	Exhaust dust		organized emissions	1	Pilot scale-up workshop dust collector	48mg/m ³	(GB16297 - 1996) Class II, 120mg/m ³	0.252t/a	3.35t/a no	
Shenyang Sanju Kate Catalyst Co., Ltd.	Exhaust soot		organized emissions	1	Molecular sieve post-treatment workshop Furnace (60m ³)	45.33mg/m ³	(GB16297 - 1996) Class II, 120mg/m ³	0.0864t/a	2.19t/a no	
Shenyang Sanju Kate Catalyst Co., Ltd.	exhaust gas	Nitrogen oxides	organized emissions	1	Molecular sieve post-treatment workshop Furnace (60m ³)	45.33mg/m ³	(GB16297 - 1996) Class II, 120mg/m ³	0.0288t/a	8.823t/a	none
Shenyang Sanju Kate Catalyst Co., Ltd.	Exhaust soot		organized emissions	1	Molecular sieve post-treatment roaster	11.33mg/m ³	(GB16297 - 1996) Class II, 120mg/m ³	0.0864t/a	2.19t/a no	

Shenyang Sanju Kate Catalyst Co., Ltd.	exhaust gas	Nitrogen oxides	organized emissions	1	Molecular sieve post-treatment workshop Furnace (60m ³)	34.67mg/m ³	(GB16297 - 1996) Class II, 120mg/m ³	0.288t/a	8.823t/a	none
Shenyang Sanju Kate Catalyst Co., Ltd.	Exhaust dust		organized emissions	1	a workshop T202 ear room dust collector (large)	46.67mg/m ³	(GB16297 - 1996) Class II, 120mg/m ³	0.452t/a	3.35t/a no	
Shenyang Sanju Kate Catalyst Co., Ltd.	Exhaust dust		organized emissions	1	a workshop T202 ear room dust collector (small)	43.33mg/m ³	(GB16297 - 1996) Class II, 120mg/m ³	0.232t/a	3.35t/a no	
Shenyang Sanju Kate Catalyst Co., Ltd.	Exhaust soot		organized emissions	1	Molecular sieve post-treatment workshop Furnace (23m ³)	45.33mg/m ³	(GB16297 - 1996) Class II, 120mg/m ³	0.0864t/a	2.19t/a no	
Shenyang Sanju Kate Catalyst Co., Ltd.	exhaust gas	Nitrogen oxides	organized emissions	1	Molecular sieve post-treatment workshop Furnace (23m ³)	34.67mg/m ³	(GB16297 - 1996) Class II, 120mg/m ³	0.288t/a	8.823t/a	none
Shenyang Sanju Kate Catalyst Co., Ltd.	Exhaust soot		organized emissions	1	Roasting furnace (absorption tower) of high-capacity sulfur powder post-processing workshop	30.33mg/m ³	(GB16297 - 1996) Class II, 120mg/m ³	0.23t/a 2.19t/a	None	
Shenyang Sanju Kate Catalyst Co., Ltd.	exhaust gas	Nitrogen oxides	organized emissions	1	Roasting furnace (absorption tower) of high-capacity sulfur powder post-processing workshop	41mg/m ³	(GB16297 - 1996) Class II, 120mg/m ³	0.3456t/a	8.823t/a	none
Shenyang Sanju Kate Catalyst Co., Ltd.	Exhaust soot		organized emissions	1	A workshop roasting furnace (electric converter)	21.67mg/m ³	(GB16297 - 1996) Secondary, 120mg/m ³	0.0288t/a	2.19t/a no	
Shenyang Sanju Kate Catalyst Co., Ltd.	exhaust gas	Nitrogen oxides	organized emissions	1	A workshop roasting furnace (electric converter)	118.67mg/m ³	(GB16297 - 1996) Class II, 120mg/m ³	0.1728t/a	8.823t/a	none
Shenyang Tripolymer Kate Catalyst	exhaust gas	Nitrogen oxides	organized emissions	1	Workshop 1 roasting furnace (electric transfer)	118.67mg/m ³	GB16297 - 1996	0.1728t/a	8.823t/a	none

limited company					furnace)		Class II, 120mg/m ³			
Shenyang Sanju Kate Catalyst Co., Ltd.	exhaust gas ammonia		organized emissions	1	Molecular sieve post-treatment workshop Furnace (60m Mesh belt)	1.48mg/m ³	100mg/m ³	0.00172 8t/a	/	none
Shenyang Trimeric Catalyst Co., Ltd.	waste water	suspended matter SS	Discharged into sewage treatment plant	1	Sewage main outlet	4mg/L	(GB8978 1996) 400mg/L	0.6912t/a	/	none
Shenyang Trimeric Catalyst Co., Ltd.	waste water	Chemical needs Oxygen (COD)	Discharged into sewage treatment plant	1	Sewage main outlet	63mg/L	GB8978 - 1996) 1000mg/L	6.048t/a	46.48t/a	none
Shenyang Trimeric Catalyst Co., Ltd.	Wastewater Total	Nickel	Discharged into sewage treatment plant	1	Sewage main outlet	0.07mg/L	GB8978 - 1996) 1mg/L	0.015t/a	/	none
Shenyang Trimeric Catalyst Co., Ltd.	total zinc in wastewater		Discharged into sewage treatment plant	1	Sewage main outlet	0.28mg/L	GB8978 - 1996) 5mg/L	0.0037t/a	/	none
Shenyang Trimeric Catalyst Co., Ltd.	Wastewater molybdenum		Discharged into sewage treatment plant	1	Sewage main outlet	0.459mg/L	GB8978 - 1996), 3mg/L	0.00012t/a	/	none
Shenyang Trimeric Catalyst Co., Ltd.	waste water	Ammonia nitrogen (NH ₃ -N)	Discharged into sewage treatment plant	1	Sewage main outlet	1.16mg/L	GB8978 - 1996) 30mg/L	0.00372t/a	3.656t/a	none
	Wastewater Petroleum		Discharged into sewage treatment plant	1	Sewage main outlet	1.03mg/L	GB8978 - 1996), 20mg/L	0.0184t/a	/	none
Daqing Sanju Energy Purification Co., Ltd.	exhaust gas	Nitrogen oxides	organized emissions	1	Neopentyl glycol workshop incinerator (36m)	49.33mg/m ³	GB1484 - 2001) 500mg/m ³	2.335t/a	23.67t/a	none
Daqing Sanju Energy Purification Co., Ltd.	Exhaust soot		organized emissions	1	Neopentyl glycol workshop	26.32mg/m ³	(GB1484 - 2001) 80mg/m ³	1.246t/a	3.79t/a	no
Daqing Sanju Energy Purification Co., Ltd.	exhaust gas	sulfur dioxide	organized emissions	1	incinerator (36m) Neopentyl glycol workshop incinerator (36m)	30.66mg/m ³	(GB1484 - 2001) 300mg/m ³	1.466t/a	14.2t/a	None

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Daqing Sanju Energy Purification Co., Ltd.	waste water	Chemical needs Oxygen (COD y	Discharged into sewage treatment plant	1	Sewage main outlet	35mg/L	"Sewage Inflow Index of Daqing Petrochemical Company"	0.875t/ a	5t/a no	
Daqing Sanju Energy Purification Co., Ltd.	Wastewater ammonia nitrogen		Discharged into sewage treatment plant	1	Sewage main outlet	0.094mg/L	"Sewage Inflow Index of Daqing Petrochemical Company"	0.00235 t/a	1.125t/ a	none
Daqing Sanju Energy Purification Co., Ltd.	Wastewater Petroleum		Discharged into sewage treatment plant	1	Sewage main outlet	0.16mg/ L	"Sewage Inflow Index of Daqing Petrochemical Company"	0.004t/ a	/	none
Shandong Sanju Bioenergy Co., Ltd.	exhaust gas	sulfur dioxide	organized emissions	P1	Suspension bed feed heating furnace, product fractionation bottom reboiler	5	DB37/23 76 -2019 Table 1 Key control area standard 50mg/m ³	/	0.16t/a None	
Shandong Sanju Bioenergy Co., Ltd.	exhaust gas	Nitrogen oxides	organized emissions	P1	Suspension bed feed heating furnace, product fractionation bottom reboiler	100	DB37/23 76 -2019 Table 1 Standard for key control areas 100mg/ m ³	/	12.10t/ a	none
Shandong Sanju Bioenergy Co., Ltd.	Exhaust soot		organized emissions	P1	Suspension bed feed heating furnace, product fractionation bottom reboiler	10	DB37/23 76 -2019 Table 1 Key control area standard 10mg/m ³	/	1.21t/a None	
Shandong Sanju Bioenergy Co., Ltd.	exhaust gas	sulfur dioxide	organized emissions	P2	Fixed bed feed heating furnace, vacuum furnace	5	DB37/23 76 -2019 Table 1 Key control area standard 50mg/m ³	/	0.43t/a None	
Shandong Sanju Bioenergy Co., Ltd.	exhaust gas	Nitrogen oxides	organized emissions	P2	Fixed bed feed heating furnace, vacuum furnace	80	DB37/23 76 -2019 Table 1 Key control area standard 100mg/m ³	/	6.94t/a no	
Shandong Sanju Bioenergy Co., Ltd.	Exhaust soot		organized emissions	P2	Fixed bed feed heating furnace, vacuum furnace	10	DB37/23 76 -2019 Table 1 key controls	/	0.87t/a None	

							Regional standard 10mg/m ³			
Shandong Sanju Bioenergy Co., Ltd.	exhaust gas	sulfur dioxide	organized emissions	P3	Reformer 5		DB37/23 76 -2019 Table 1 Key control area standard 50mg/m ³	/	1.59/a None	
Shandong Sanju Bioenergy Co., Ltd.	exhaust gas	Nitrogen oxides	organized emissions	P3	Reformer 100		DB37/23 76 -2019 Table 1 Key control area standard 100mg/m ³	/	31.71/ a	none
Shandong Sanju Bioenergy Co., Ltd.	Exhaust soot		organized emissions	P3	Reformer 10		DB37/23 76 -2019 Table 1 Standards for key control areas	/	3.17/a None	
Shandong Sanju Bioenergy Co., Ltd.	exhaust gas	Total non-methane hydrocarbons	organized emissions	P4	Old oil and gas recovery	/	10mg/m ³ "Petrochemical Industry Pollutant Discharge Standards" (GB315 71 - 2015) Removal efficiency γ	/	2.75/a no	
Shandong Sanju Bioenergy Co., Ltd.	exhaust gas	Total non-methane hydrocarbons	organized emissions	P5	Recovery of new oil and gas	/	97% "Petrochemical Industry Pollutant Discharge Standard" (GB315 71 - 2015) Removal efficiency γ 97% Discharged into	/	7.27/a no	
Shandong Sanju Bioenergy Co., Ltd.	Wastewater sulfide		Haiyou Petrochemical Sewage Treatment Station	1	Sewage main outlet	35mg/L	Haiyou Petrochemical Wastewater Treatment Station	/	/	none
Shandong Sanju Bioenergy Co., Ltd.	Wastewater ammonia nitrogen		Haiyou Petrochemical Sewage Treatment Station	1	Sewage main outlet	130mg/L	Agreement standard Discharged into Haiyou Petrochemical	/	/	none
Shandong trimer biological	Wastewater CODcr		Haiyou petrochemical sewage	1	Sewage main outlet	4000mg/ L	Wastewater Treatment Station Agreement standard Discharged into Haiyou Petrochemical	/	/	none

energy co., Ltd.			processing station				Sewage Treatment Station			
Shandong Sanju Bioenergy Co., Ltd.	Wastewater oil content		Haiyou Petrochemical Sewage Treatment Station	1	Sewage main outlet	500mg/L	Agreement Standard Discharge into Haiyou Petrochemical Sewage Treatment Station Agreement Standard	/	/	none
Sichuan Xinda New Energy Technology Co., Ltd.	Exhaust dust		organized emissions	1	Heat energy workshop boiler exhaust outlet	20mg/m ³	GB132 23 - 2011) Special emission limit of 20mg/m ³	2.155/ a	16.89/ a	none
Sichuan Xinda New Energy Technology Co., Ltd.	exhaust gas	Nitrogen oxides	organized emissions	1	Heat energy workshop boiler exhaust outlet	100mg/m ³	GB132 23 - 2011) Special emission limit of 100mg/m ³	12.705 t/a	75.31/ a	none
Sichuan Xinda New Energy Technology Co., Ltd.	exhaust gas	sulfur dioxide	organized emissions	1	Heat energy workshop boiler exhaust outlet	50mg/m ³	GB132 23 - 2011) Special emission limit of 50mg/m ³	4.285 t/a	42.22/ a	none
Sichuan Xinda New Energy Technology Co., Ltd.	exhaust gas	Volatile Organic Compounds VOCs	organized emissions	1	Heat energy workshop exhaust gas general exhaust pipe	120mg/m ³	(GB162 97 - 1996) Secondary emission standard 120mg/m ³	0.122 t/a	4.77t/a no	
Sichuan Xinda New Energy Technology Co., Ltd.	waste water	suspended matter SS	Discharged into sewage treatment plant	1	Comprehensive wastewater discharge mouth	70mg/L	(GB8978 1996)70 mg/L	0.00167 3t/a	/	none
Co., Ltd. Sichuan Xinda New Energy	waste water	Chemical needs Oxygen (COD)	Discharged into sewage treatment plant	1	Comprehensive wastewater discharge mouth	100mg/L	GB8978 8 - 1996)10 0mg/ L	0.00305 t/a	3.38t/a no	
Technology Co., Ltd. Sichuan Xinda New	Wastewater total phosphorus		Discharged into sewage treatment plant	1	Comprehensive waste water outlet	0.5mg/L	GB8978 8 - 1996)0. 5mg/ L	0.00001 9t/a	/	none
Energy Technology Co., Ltd. Sichuan	waste water	TOC	Discharged into sewage treatment plant	1	Comprehensive waste water outlet	20mg/L	GB8978 - 1996) 20 mg/L	0.00076 2t/a	/	none
Xinda New Energy Technology Co., Ltd.	waste water	BOD ₅	Discharged into sewage treatment plant	1	Comprehensive waste water outlet	20mg/L	GB8978 8 - 1996)20	0.00066 9t/a	/	none

Co., Ltd.							mg/L			
Sichuan Xinda New Energy Technology	waste water	Ammonia nitrogen (NH ₃ -N)	Discharged into sewage treatment plant	1	Comprehensive waste water outlet	15mg/L	γGB897y 8 - 1996)15 mg/L	0.00013 7t/a	0.507/ a	none
Co., Ltd. Inner Mongolia Meifang Coal Coking Co., Ltd.	exhaust gas	sulfur dioxide	Inline 2		1# boiler outlet, 2# boiler outlet 1# flue	100mg/N m3	Boiler Air Pollutant Emission Standards	6.216mg /Nm3	49.65mg/Nm3	none
Inner Mongolia Meifang Coal Coking Co., Ltd.	exhaust gas	sulfur dioxide	1#2# The flue gas is discharged after treatment, and the tube furnace is directly exhausted	5	gas outlet, 2# flue gas outlet, 1# ground dust removal station, 2# ground dust removal station, 1# tube	30mg/Nm 3	Pollutant Discharge Standards for Coking Chemical Industry GB16171 -2012	26.495m g/Nm3	177.98m g/Nm3	none
Inner Mongolia Meifang Coal Coking Co., Ltd.	exhaust gas	Nitrogen oxides	Inline 2		furnace 1# boiler outlet, 2# Boiler outlet	400mg/N m3	Air Pollutant Emission Standards for	84.37mg/Nm3	198.6mg /Nm3	none
Inner Mongolia Meifang Coal Coking Co., Ltd.	exhaust gas	Nitrogen oxides	1#2# The flue gas is discharged after treatment, and the tube furnace is directly exhausted	3	1# flue gas outlet, 2# flue gas outlet, 1# tube furnace	150mg/Nm3	Boilers Emission Standards for Coking Chemical Industry GB16171 -2012	415.198 mg/ Nm3 Pollutants	446.4mg /Nm3	none
Inner Mongolia Meifang Coal Coking Co., Ltd.	Exhaust particulate matter		1#2# Boiler direct discharge, 1#2# Ground dust removal station discharge after treatment	4	1# boiler outlet, 2# boiler outlet, 1# ground dust removal station, 2# ground dust removal station,	30mg/Nm 3	Boiler Air Pollutant Emission Standard, Coking Chemical Industry Pollutant Emission Standard GB16171 -2012	30,734m g/Nm3	75.96mg/Nm3	none
Inner Mongolia Meifang Coal Coking Co., Ltd.	Exhaust particulate matter		1#2# flue gas, 1#2# crushing and dust removal, 1#2# coke screening and dust removal after treatment, discharge, 1# tube furnace direct discharge	7	1# flue gas outlet, 2# flue gas outlet, 1# tube furnace, 1# crushing and dust removal, 2# crushing and dust removal, 1# sieve coke dust removal, 2# sieve coke removal	15mg/Nm 3	Pollutant Discharge Standards for Coking Chemical Industry GB16171 -2012	22.013m g/Nm3	63.76mg/Nm3	none

					dust					
Inner Mongolia Meifang Coal Coking Co., Ltd.	Exhaust particulate matter		Discharge after treatment	1	Ammonium sulfate dust outlet	50mg/Nm ³	Pollutant Discharge Standards for Coking Chemical Industry GB16171-2012	1.339mg/Nm ³	The country has not issued accounting standards	none
Inner Mongolia Meifang Coal Coking Co., Ltd.	exhaust gas	Ringelmann blackness	Inline 2		1# boiler outlet, 2# boiler outlet	Level 1	Air Pollutant Emission Standards for Boilers	0mg/Nm ³	The country has not issued accounting standards	none
Inner Mongolia Meifang Coal Coking Co., Ltd.	Exhaust gas benzopyrene		Discharge after treatment	2	1# ground dust removal station, 2# ground dust removal station,	0.0003mg/Nm ³	Emission Standards for Coking Chemical Industry Pollutants GB16171-2012	0mg/Nm ³	The country has not issued accounting standards	none
Inner Mongolia Meifang Coal Coking Co., Ltd.	exhaust gas	Ammonia (ammonia gas)	Discharge after treatment	4	Ammonium sulfate dust removal, 1# flue gas exhaust Mouth, 2# smoke exhaust port, RTO furnace	10mg/Nm ³	Pollutant Discharge Standards for Coking Chemical Industry GB16171-2012	0.321mg /Nm ³	The country has not issued accounting standards	none
Inner Mongolia Meifang Coal Coking Co., Ltd.	Exhaust gas hydrogen sulfide		Discharge after treatment	3	1# flue gas outlet, 2# flue gas outlet, RTO furnace	1mg/Nm ³	Pollutant Discharge Standards for Coking Chemical Industry GB16171-2012	0mg/Nm ³	The country has not issued accounting standards	none
Inner Mongolia Meifang Coal Coking Co., Ltd.	exhaust gas	Total non-methane hydrocarbons	Discharge after treatment	3	1# flue gas outlet, 2# flue gas outlet, RTO furnace	50mg/Nm ³	Discharge Standard for Coking Chemical Industry GB16171-2012	0mg/Nm ³	The country has not issued accounting standards	none
Inner Mongolia Meifang Coal Coking Co., Ltd.	Waste gas hydrogen cyanide		Discharge after treatment	3	1# flue gas outlet, 2# flue gas outlet, RTO furnace	1.0mg/Nm ³	Pollutant Discharge Standards for Coking Chemical Industry GB16171-2012	0mg/Nm ³	The country has not issued accounting standards	none
Inner Mongolia Meifang Coal Coking Co., Ltd.	Exhaust gas benzene		Discharge after treatment	2	1# flue gas outlet, 2# flue gas outlet,	6mg/Nm ³	Pollutant Discharge Standards for Coking Chemical Industry GB16171-2012	0mg/Nm ³	The country has not issued accounting standards	none
Inner Mongolia Meifang Coal Coking Co., Ltd.	Exhaust gas phenols		Discharge after treatment	2	1# flue gas outlet, 2# flue gas	50mg/Nm ³	Coking Chemical Industry Pollutants	0mg/Nm ³	The country has not issued accounting standards	none

limited company					Outlet,		Emission Standards GB16171 -2012			
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Treatment of Pollutants

During the reporting period, the company and its subsidiaries strictly complied with the national environmental protection standards, and there were no major environmental problems and no major environmental pollution accidents.

Shenyang Sanju Kate Catalyst Co., Ltd., a wholly-owned subsidiary of the company, Daqing Sanju Energy Purification Co., Ltd., a holding subsidiary, and Shandong Sanju Biotechnology, a holding subsidiary Energy Co., Ltd., the holding subsidiary Sichuan Xinda New Energy Technology Co., Ltd. and the holding subsidiary Inner Mongolia Meifang Coal Coking Co., Ltd. belong to the environmental protection department

The above-mentioned subsidiaries have established corresponding protection/prevention facilities to ensure that waste water, waste gas, etc. meet the discharge standards. During the reporting period, all facilities were normal operation.

(1) Protection/prevention facilities of Shenyang Sanju Kite Catalyst Co., Ltd.

ȳ. Nitrogen oxide pollution prevention and control facilities: the low-concentration flue gas containing nitrogen oxides produced by roasting is sent to the lye absorption tower through the flue, washed and cleaned with 5-15% lye chemical, and then discharged through the exhaust pipe in an organized manner (the lye absorption device consists of an absorption tower, lye tank, and lye pump). High-concentration flue gas containing nitrogen oxides produced by roasting It is sent to the catalytic reduction denitrification device through the flue for treatment, and is discharged through the exhaust stack in an organized manner.

ȳ. Dust pollution prevention and control facilities: the dust station is equipped with a bag filter, and the dust is discharged through the exhaust pipe after the dust is collected by the bag.

ȳ. Sewage prevention and control facilities: There are one waste water treatment pool of 150m3, one of 500m3 and one accident pool of 1,000m3. Built with a daily processing capacity of 120 tons of high ammonia nitrogen Wastewater pretreatment device, a comprehensive wastewater treatment station with a daily treatment capacity of 600 tons (dosing to remove heavy metals + high ammonia nitrogen wastewater (pretreatment) + nickel-containing wastewater dosing pretreatment + hydrolysis life + MBR).

(2) Protection/prevention facilities of Daqing Sanju Energy Purification Co., Ltd.

ȳ. Exhaust gas prevention and control facilities: The exhaust gas produced by the styrene workshop and the neopentyl glycol workshop enters the incinerator through the closed pipeline for incineration treatment. The exhaust gas treatment of the incinerator can Capacity 1,883m3 /h, waste liquid treatment capacity 132kg/h. The self-built flare system is used as an emergency disposal facility to maintain long-term combustion, and the waste gas treatment capacity of the flare system is 12,000m3 /h.

ȳ. Sewage prevention and control facilities: There is a waste water treatment plant and a 4,252m3 accident pool. The daily waste water treatment capacity of the sewage treatment plant is 360 tons/day, (EGSB process + A/O biochemical process).

The company will strictly abide by national environmental laws and regulations, departmental rules and industry standards, continuously improve environmental protection facilities in accordance with relevant national policies and increase corresponding Investment in environmental protection to ensure that various pollutants are discharged up to standards.

(3) Protection/prevention facilities of Shandong Sanju Bioenergy Co., Ltd.

ȳ. Facilities for the prevention and control of SO2, NOx, dust and other pollutants: the heating furnaces and reboilers of each device all adopt low-nitrogen burners, and the heating furnaces of the hydrogenation unit adopt pipelines Natural gas; the air is released from each tower, the non-condensable gas from the flash tank is sent to the heating furnace, and the insufficient part is fueled by natural gas. The sulfur content of the above raw materials is extremely low, about 20mg/m3. The main pollutants in the flue gas produced by combustion are sulfur dioxide and nitrogen oxides. Low-nitrogen burners are used, and the exhaust gas is continuously discharged into the atmosphere through a tall chimney. Smoke Emission Pollutants The concentration meets the standards in Table 2 of the "Comprehensive Discharge Standards for Regional Air Pollutants" (DB37/2376-2019).

ȳ. Unorganized control in storage tank area and loading and unloading area: internal floating roof tanks are used for volatile oil materials such as biodiesel and bio light oil, and biological raw material oil and external flick oil are recovered Vault tanks are used, and the loading and unloading truck adopts a special crane tube liquid closed loading and unloading method. The tank area is equipped with 2 sets of headspace communication replacement oil and gas recovery devices, which adopt "absorption + condensation" respectively. (minimum temperature -25°C) + activated carbon adsorption (analysis)" and "four-stage condensation (minimum temperature -65/-75°C) + activated carbon adsorption (analysis)", processing raw material tank area And organic waste gas from loading and unloading trucks. The treatment efficiency of oil and gas recovery can meet the "Petrochemical Industry Pollutant Discharge Standard" (GB 31571-2015) Table 4 (removal efficiency ȳ97%), the treated exhaust gas is discharged through the respective exhaust pipes.

(4) Protection/prevention facilities of Sichuan Xinda New Energy Technology Co., Ltd.

ȳ. Process tail gas: production process tail gas (formaldehyde concentration device tail gas, methylal unit rectification tower tail gas, paraformaldehyde unit process tail gas and polyoxymethylene dimethyl Ether unit process tail gas) is incinerated by the tail gas processor, the combustion heat is recovered, and the flue gas is discharged through a 30m high chimney.

ȳ. Boiler flue gas, circulating fluidized bed coal-fired boiler, adopts low-nitrogen combustion technology and SNCR denitrification process denitrification + bag filter dust removal + limestone-gypsum wet method Desulfurization process, the treated flue gas is discharged through a 50m high chimney. The main monitoring indicators are: smoke, sulfur dioxide, nitrogen oxides. (Installed with flue gas online monitoring

The instrument is connected to the provincial department)

ȳ. Quality inspection tail gas, analysis and testing involving organic solvents are all carried out in the fume hood.

High stack emissions.

γ. Production and domestic wastewater: build a sewage treatment station with a design treatment capacity of 200m³/d, and use "sodium hypochlorite oxidation + hydrolytic acidification + contact oxidation" for treatment

craft. Production wastewater mainly includes methylal production wastewater, paraformaldehyde production wastewater, and domestic sewage.

The water treatment plant is discharged after retreatment.

The company will strictly abide by national environmental laws and regulations, departmental rules and industry standards, continuously improve environmental protection facilities in accordance with relevant national policies and increase corresponding

Investment in environmental protection to ensure that various pollutants are discharged up to standards.

(5) Protection/prevention facilities of Inner Mongolia Sanju Jiajing New Energy Co., Ltd.

γ. Waste heat boiler effluent and domestic sewage treated by septic tanks are discharged into the park's sewage treatment plant through the park's sewage pipe network for entrusted treatment; construction of accident drainage pools

(also used as a fire fighting wastewater pool) with a volume of 5000m³, and the bottom layer is used for anti-seepage.

γ. Temporary storage of waste desulfurizers and waste activated carbon, covering an area of about 200m² Temporary storage, in accordance with the "Pollution Control Standards for Hazardous Waste Storage"

(GB18597-2001) and relevant provisions of the revision list.

γ. Ammonia buffer tank release gas: Purified by a non-powered ammonia recovery system and then sent to the US coking project through the LNG project's established release gas pipeline network

It is burned as a fuel for returning to the furnace.

(6) Protection/prevention facilities of Inner Mongolia Meifang Coal Coking Co., Ltd.

I. There are 3 fully enclosed greenhouses in the clean coal and coke powder storage yard, the coal transfer station and the coal transportation corridor are closed, and the dust suppression efficiency is above 99%.

II. 2 side spray pulse bag dust collectors, used to collect and process the coal dust generated by the crushing of clean coal. The exhaust pipe is 20m high and the dust removal efficiency is over 99%.

III. Two desulfurization and denitrification devices are built to treat the waste gas after coke oven heating. The project consists of flue system, desulfurization system, denitrification system and ammonia system.

become.

γ. The treatment process of the phenol cyanide sewage treatment station is A2/O process, the maximum treatment capacity is 200m³/h, and the average treatment capacity is 90m³/h. All treated sewage is used for

Burn out.

Emergency plan for environmental emergencies

(1) Shenyang Sanju Kate Catalyst Co., Ltd.

The contingency plan for environmental emergencies has been filed at the Economic and Technological Development Zone Branch of Shenyang Ecological Environment Bureau in December 2019

(2) Daqing Sanju Energy Purification Co., Ltd.

Formulate an emergency plan for environmental emergencies and report to the Safety and Environmental Protection Bureau of Daqing High-tech Zone for filing.

(3) Shandong Sanju Bioenergy Co., Ltd.

Formulate an emergency plan for environmental emergencies, and file it with the Ju County Safety and Environmental Protection Bureau in August 2021.

(4) Sichuan Xinda New Energy Technology Co., Ltd.

The contingency plan for environmental emergencies has been filed with the Mianyang Ecological and Environmental Protection Bureau in April 2019.

(5) Inner Mongolia Sanju Jiajing New Energy Co., Ltd.

Formulate an emergency plan for environmental emergencies and report to the Safety and Environmental Protection Bureau of Alashan High-tech Industrial Development Zone for filing in September 2020.

(6) Inner Mongolia Meifang Coal Coking Co., Ltd.

Formulate an emergency plan for environmental emergencies and report to the Wuda Branch of the Wuhai Ecological Environment Bureau for filing in December 2020.

Environmental Self-Monitoring Program

(1) Shenyang Sanju Kate Catalyst Co., Ltd.

A third party with monitoring qualifications has been entrusted to conduct environmental monitoring, and all monitoring indicators meet the standards.

(2) Daqing Sanju Energy Purification Co., Ltd.

In accordance with the entrusted environmental assessment requirements, a third-party qualified environmental monitoring unit has been entrusted to carry out testing work, and all monitoring indicators are in compliance with the standards.

(3) Shandong Sanju Bioenergy Co., Ltd.

A third party with monitoring qualifications has been entrusted to conduct environmental monitoring, and all monitoring indicators meet the standards.

(4) Sichuan Xinda New Energy Technology Co., Ltd.

A third party with monitoring qualifications has been entrusted to conduct environmental monitoring, and all monitoring indicators meet the standards.

(5) Inner Mongolia Sanju Jiajing New Energy Co., Ltd.

A third party with monitoring qualifications has been entrusted to conduct environmental monitoring, and all monitoring indicators meet the standards.

(6) Inner Mongolia Meifang Coal Coking Co., Ltd.

A third party with monitoring qualifications has been entrusted to conduct environmental monitoring, and all monitoring indicators meet the standards.

Investment in environmental governance and protection and the payment of environmental protection tax

(1) Shenyang Sanju Kate Catalyst Co., Ltd.

In 2022, the investment in environmental governance and protection will be 1.1492 million yuan, and the environmental protection tax will be 5,492.45 yuan.

(2) Daqing Sanju Energy Purification Co., Ltd.

In 2022, the investment in environmental governance and protection will be 889,700 yuan, and the environmental protection tax will be 3,576.71 yuan.

(3) Shandong Sanju Bioenergy Co., Ltd.

In 2022, the investment in environmental governance and protection will be 2.6198 million yuan, and the environmental protection tax will be 34,095.62 yuan.

(4) Sichuan Xinda New Energy Technology Co., Ltd.

In 2022, the investment in environmental governance and protection will be 0 yuan, and the environmental protection tax will be 0 yuan.

(5) Inner Mongolia Sanju Jiajing New Energy Co., Ltd.

In 2022, the investment in environmental governance and protection will be 216,500 yuan, and the environmental protection tax will be 0 yuan.

(6) Inner Mongolia Meifang Coal Coking Co., Ltd.

In 2022, the investment in environmental governance and protection will be 18.4674 million yuan, and the environmental protection tax will be 4,803,097.55 yuan.

Measures and effects taken to reduce its carbon emissions during the reporting period

Applicable/Not applicable

Administrative penalties due to environmental issues during the reporting period

Company or Subsidiary Name	Reason for punishment	Violation	Penalty result	The impact on the production and operation of listed companies	The company's corrective measures
Inner Mongolia Meifang Coal Coking Co., Ltd.	On the morning of January 3, 2022, the abnormality of the 3# coke oven combined with coal caused the single-hole coke to collapse, causing instantaneous smoke. On	Violation of Article 108 (5) of the Air Pollution Prevention and Control Law of the People's Republic of China	A fine of RMB 20,000	No impact on the production and operation of the company	The company has completed the rectification and will pay an administrative fine of 20,000 yuan on February 16, 2022.
Inner Mongolia Meifang Coal Coking Co., Ltd.	February 24, 2022, Inner Mongolia Fuyuan Xinji Testing Co., Ltd. was entrusted to carry out law enforcement monitoring on the company's phase I and phase II coke quenching pool sewage. The test results showed that the chemical oxygen demand in the phase I was 217mg/L, and the cyanide was 0.211mg/L, the second-stage chemical oxygen demand is 188mg/L, and cyanide is 0.262mg/L (indirect discharge standard in Table 1 in the coking chemical industry pollutant discharge standard GB16171-2012	Violation of Article 10 of the "Water Pollution Prevention and Control Law of the People's Republic of China"	A fine of seven hundred and one thousand yuan	No impact on the production and operation of the company	The company has completed the rectification and will pay an administrative fine of 701,000 yuan on May 25, 2022.

	The standard value of quasi-COD is 150mg/L, and the standard value of cyanide is 0.2mg/L, both of which exceed the standard. On May 06, 2022,				
Inner Mongolia Meifang Coal Coking Co., Ltd.	the Wuhai City Ecological Environment Comprehensive Administrative Law Enforcement Detachment entrusted Inner Mongolia Fuyuan Xinji Testing Co., Ltd. to conduct law enforcement monitoring of the company's Phase I and Phase II coke quenching pool sewage. The discharge concentrations of cyanide in coke pond sewage were 0.460mg/L and 0.298mg/L, both of which exceeded the discharge concentration limit standards.	Violation of Article 10 and Article 83 (2) of the "Water Pollution Prevention and Control Law of the People's Republic of China"	A fine of RMB 100,000	No impact on the production and operation of the company	The company has completed the rectification and will pay an administrative fine of 100,000 yuan on November 3, 2022.

Other environmental information that should be disclosed

(1) Shenyang Sanju Kate Catalyst Co., Ltd.

The 2020 environmental information disclosure and 2020 environmental statistics have been reported, and the 2021 hazardous waste transfer plan has been reported and passed the review of relevant departments.

(2) Sichuan Xinda New Energy Technology Co., Ltd.

The 2020 environmental information disclosure and 2020 environmental statistics have been reported, and the 2021 hazardous waste transfer plan has been reported and passed the review of relevant departments.

Other environmental related information

none

The company needs to comply with the disclosure requirements for "business related to the chemical industry" in the "Guidelines for Self-Regulatory Supervision of Listed Companies of Shenzhen Stock Exchange No. 3 - Industry Information Disclosure"

Information about environmental accidents in listed companies

none

2. Social Responsibility

As a high-tech enterprise and a listed company on the GEM, the company has always been adhering to the development concept of technological innovation, sustainable development, safety and environmental protection, and insisting on human

Based on the purpose of development, actively promote the institutionalization of safety and environmental protection management, strengthen risk control, hidden danger investigation and rectification, shoulder the social responsibility of safety and environmental protection, and give back to the society meeting. In the whole year of 2022, the company will strictly abide by various national safety and environmental protection rules and regulations, and complete the work expectations in terms of production safety and environmental protection.

Insurance accident.

(1) Improve production safety and environmental protection management system and strengthen production safety and environmental protection management

In 2022, the company will reorganize and revise the production safety management system, improve special operation management, and sign the annual safety and environmental protection management responsibility target ; At the same time, all subordinates are required to produce or use dangerous chemicals

Enterprises with high-end products should establish and improve safety production committees to coordinate and implement major safety and environmental protection technical transformation technical measures and hidden danger rectification problems in the production process, and at the same time improve

As for its production safety responsibility system and job responsibilities, the Production Safety and Environmental Protection Department, as the company's production safety and environmental protection centralized management department, conscientiously performs management duties and supervises the implementation

Various management systems, safety inspections, and hidden danger rectification related to safety and environmental protection management.

(2) Daily safety and environmental protection supervision and management

While strictly implementing the production safety responsibility system and post safety responsibility system, the company and its branch companies have established safety production management institutions or equipped with full-time security personnel.

The person in charge of safety and environmental protection shall clarify the goals and tasks of the annual safety and environmental protection work, and organize weekly, monthly and quarterly safety and environmental protection inspections, and increase the daily

Regular inspections are carried out to ensure the normal operation of safety prevention and control facilities and environmental protection facilities, and immediate corrections are made when problems are found; daily environmental sanitation management on site is strengthened to ensure that materials are clean after work

The site is clear, a suitable working environment is created, and safety and environmental risks are effectively controlled.

In addition, in June of this year, the company responded to the call of the state and the State Council, and actively carried out a 30-day "Safety Activity Month" activity, focusing on "safety compliance"

Production method, be the first responsible person" theme, carry out all-round safety management publicity, education and hidden danger rectification work, strengthen the safety management level of each branch company

and employees' awareness and methods of safety risk prevention and accident handling.

(3) Investment in safety and environmental protection funds

As of the end of December 2022, the company strictly abides by the national regulations on the withdrawal of special safety funds for production units.

According to national regulations and industry standards, a safety fund of 28.063 million yuan was invested, including the purchase of labor supplies, special equipment and pressure vessel testing, and hidden danger rectification.

wait.

In addition, the environmental protection expenses of the subordinate production units totaled 23.3426 million yuan, including third-party testing fees, environmental protection facility maintenance, sewage treatment fees, solid

Waste transfer and disposal costs, etc.

(4) Energy saving and emission reduction and clean production

Subordinate production units strictly implement the company's sustainable development concept, strengthen energy conservation, emission reduction and clean production management, strictly abide by various environmental protection emission standards and

and testing plan to achieve emission standards and reduce emissions. For example: the production and domestic sewage generated by Sanju Jiajing are all processed by adding "Zero Discharge Water Treatment Chemicals"

It is used for the replenishment of spray water in the circulating water system, and the waste water is reused in the circulating cooling water system. By adding zero-discharge water treatment chemicals, the circulating water system is not corrupted.

Corrosion, scaling. The waste water is reused thoroughly, and the water saving effect is remarkable; the annual sewage discharge is reduced by about 50,000 tons; Sichuan Xinda combines the characteristics of its own product production to apply for the Sichuan

Green Manufacturing Factory in Mianyang City, Province.

(5) Safety standardization management

The company attaches great importance to the standardization of safety production, and vigorously promotes the standardization and rating of various subsidiaries. Up to now, the subordinate production units have all completed

Sanju Kate, Sanju Jiajing, Daqing Sanju, and Sichuan Xinda are all three-level safety standardization enterprises. At the same time, in the daily

In the production and operation, the management concept of production and operation and employee health is fully implemented to create a safe working environment and living environment for the enterprise.

The company's headquarters (including Sanju Kite) has continuously developed and made progress over the years, and has continuously obtained quality management system ISO9001, environmental management system ISO14001, professional

Industrial health and safety management system ISO45001 certification.

The company's subordinate production enterprises have established corresponding management systems according to their respective production characteristics. Sichuan Xinda has obtained ISO9001/ISO14001/ISO45001 quality and environment certification

and occupational health and safety management system certificate; Sanju Jiajing obtained ISO9001/ISO14001/ISO45001 quality, environment and occupational health and safety management system certificate

Book, and ISO50001 energy management system certificate; Daqing Sanju established ISO9001 quality management system and EU chemical system certification, Shandong Sanju is doing

certification work.

The company promotes professionalism through various forms such as safety inspections, management system audits, safety evaluations, special inspections, surprise inspections, and mutual supervision of employees.

Health work continued to be carried out effectively.

For details, please refer to the "2022 Annual Social Responsibility Report" published by the company on www.cninfo.com.cn on April 7, 2022.

The company needs to comply with the disclosure requirements for "business related to the chemical industry" in the "Guidelines for Self-Regulatory Supervision of Listed Companies of Shenzhen Stock Exchange No. 3 - Industry Information Disclosure"

none

3. Consolidate and expand the achievements of poverty alleviation and rural revitalization

none

Section 6 Important Matters

1. Fulfillment of commitments

1. Commitments made by the company's actual controller, shareholders, related parties, acquirers, and the company and other related parties that have been fulfilled during the reporting period and that have not been fulfilled by the end of the reporting period

√ Applicable √ Not applicable

Promise	Promising party	Commitment Type	Commitment Content	Commitment Time	Commitment Period	Fulfillment
Commitment made in acquisition report or equity change report	Beijing Haidian District State-owned Assets Investment Management Co., Ltd.	Commitments on horizontal competition, related transactions, and capital occupation	<p>1. In terms of related party transactions between the two parties, the company strictly follows market principles and tries to avoid unnecessary related party transactions. Necessary related party transactions arising from continuous operation should be handled in the manner stipulated in the agreement between the two parties, following market-oriented principles. Pricing principles to avoid damage to the rights and interests of the majority of small and medium shareholders.</p> <p>2. It will try to avoid and reduce related transactions that may occur with listed companies in the future. For related transactions that cannot be avoided or occur for reasonable reasons, the company promises to follow the market-oriented principles of fairness, fairness and openness, sign agreements in accordance with the law, and perform legal procedures. fulfill the obligation of information disclosure and go through the relevant approval procedures in accordance with the provisions of the</p>	July 30, 2018	long	Normal fulfillment

			<p>It is easy to damage the legitimate rights and interests of listed companies and other shareholders. 3. The company's commitment to reduce and standardize related transactions will also apply to the company's affiliated companies, and within the scope of legal authority, promote the company's affiliated companies to perform and regulate existing or possible related transactions with listed companies. obligation.</p> <p>4. The company will exercise shareholders' rights in strict accordance with laws and regulations and the relevant provisions of the articles of association of listed companies; when voting on related transactions involving the company or the company's affiliated companies at the shareholders' meeting of Sanju Environmental Protection, it will perform the obligation to avoid voting; The company promises to put an end</p>			
Commitment made in acquisition report or equity change report	Beijing Haixinzhi Low Carbon Technology Development Co., Ltd.	Commitments on horizontal competition, related transactions, and capital occupation	<p>to all illegal occupation of funds and assets of listed companies. Horizontal competition: "1. As of the date of this commitment, the company and other companies controlled by the company have not engaged in or participated in any business or activity that constitutes a substantial competitive relationship with the main business of Sanju Environmental Protection;</p> <p>2. After this acquisition, The company and other companies controlled by the company will not directly or indirectly engage in the same business as the main business of Sanju Environmental Protection; 3. The company promises not to use its position as the controlling shareholder of Sanju Environmental Protection</p>	September 16, 2021	long	Normal fulfillment

			<p>The legitimate rights and interests of Sanju Environmental Protection.</p> <p>For objective reasons such as policy adjustments and market changes that cannot be performed or adjustments are required, the company and Sanju Environmental Protection will make public explanations to the market in advance, fully disclose the reasons for adjustments or failure to perform, and propose corresponding disposal measures .</p> <p>"Related transactions: "After the completion of this acquisition, the company and other companies controlled by the company will continue to regulate related transactions with Sanju Environmental Protection. If there are unavoidable related transactions, the company and other companies controlled by the company will follow the relevant laws and regulations, normative documents and Sanju Environmental Protection's "Articles of Association", "Beijing Sanju Environmental Protection New Materials Co., Ltd. Related Transaction Management System" and other relevant regulations, strictly implement the decision-making procedures, and follow the fair and reasonable market pricing principles to operate fairly, and will not use such related transactions to damage the interests of Sanju Environmental Protection and other small and medium shareholders.</p> <p>For objective reasons such as policy adjustments and market changes that cannot be performed or adjustments are required, the company and Sanju Environmental Protection will make an explanation to the market in advance, and fully disclose the adjustments that need to be made or that have not been made.</p>			
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			The reason for the performance and put forward the			
Commitments made at IPO or refinancing	Beijing Haidian Technology Development Co., Ltd., Beijing Haidian District State-owned Assets Investment Management Co., Ltd., Beijing Two-dimensional Investment Management Co., Ltd., Beijing Daxing Foundation Technology Development Co., Ltd., Beijing Zhongheng Tianda Technology Development Co., Ltd., Liu Lei, Lin Ke, Zhang Xueling, Shi Tao	Commitments on horizontal competition, related transactions, and capital occupation	<p>corresponding disposal measures. "The company's original controlling shareholder Beijing Haidian Technology Development Co., Ltd., Beijing Haidian District State-owned Assets Investment and Operation Company, Beijing Two-Dimensional Investment Management Co., Ltd., Beijing Daxing Jiye Technology Development Co., Ltd. and its actual controllers Liu Lei, Shi Tao, shareholders of the company Beijing Zhongheng Tianda Science and Technology Development Co., Ltd. promised before going public: "First, I, the company, its holding companies, and shareholding companies currently have no business that constitutes or may constitute direct or indirect competition with the main business of the joint-stock company. In the future, it will not be engaged in any place in China and in any way (including but not limited to investment, acquisition, joint venture, joint venture, contracting, lease operation, or other ownership of shares and interests) that constitutes or may constitute a direct relationship with the main business of the joint stock company. or indirect competitive business. 2. If there is any business opportunity for me, the company, the holding company, and the shareholding company to engage in, participate in or buy</p>	April 27, 2010	long	<p>Since the listing of the company, the commitment of the shareholders of the initial public offering of shares to avoid horizontal competition has been effectively fulfilled.</p> <p>engage in a business that constitutes or may constitute direct or indirect competition with the main business of the joint-stock company</p>

			<p>Do your best to help the joint stock company obtain this business opportunity.</p> <p>*The company's shareholders Lin Ke and Zhang Xueling promised before listing:</p> <p>*As a shareholder of Sanju Environmental Protection, there is currently no horizontal competition with Sanju Environmental Protection. I hereby solemnly promise that I will not invest in companies or enterprises other than Sanju Environmental Protection in the future to engage in business and operations that constitute substantial horizontal competition with Sanju Environmental Protection. I am willing to bear the direct and indirect economic losses, compensation costs and any additional expenses incurred by Sanju Environmental Protection due to violation of the aforementioned commitments. *</p>			
Whether the promise is fulfilled on time.	yes					
If the promise is overdue and not fulfilled, the specific reasons for the unfulfilled performance and the next work plan should be explained in detail.	none					

2. If there is a profit forecast for the company's assets or projects, and the reporting period is still in the profit forecast period, the company will explain why the assets or projects have reached the original profit forecast and why

¥Applicable¥Not applicable

2. Non-operating capital occupation of listed companies by controlling shareholders and other related parties

¥Applicable¥Not applicable

During the reporting period of the company, there was no non-operating capital occupation of listed companies by controlling shareholders and other related parties.

3. Illegal external guarantees

¥Applicable¥Not applicable

During the reporting period, the company had no external guarantees in violation of regulations.

4. Explanation of the board of directors on the latest "non-standard audit report"

ÿApplicableÿNot applicable

V. Explanation of the board of directors, board of supervisors and independent directors (if any) on the "non-standard audit report" of the accounting firm for the reporting period

ÿApplicableÿNot applicable

6. Explanation of the board of directors on changes in accounting policies and accounting estimates or correction of major accounting errors during the reporting period

ÿ Applicable ÿ Not applicable

For details, see Section X, V, 44 Changes in Important Accounting Policies and Accounting Estimates.

7. Explanation on changes in the scope of consolidated statements compared with the financial report of the previous year

ÿ Applicable ÿ Not applicable

Subsidiary type	Company Name	business nature	Obtaining method	Change from previous year
Wholly owned subsidiary	HAIXIN ENERGY TECHNOLOGY INTERNATIONAL PTE.LTD.	General trade, consulting service investment establishment		New in this issue

8. Appointment and Dismissal of Accounting Firms

The current accounting firm

Domestic accounting firm name	Reanda Certified Public Accountants (Special General Partnership)
Domestic accounting firm remuneration (10,000 yuan)	263
Consecutive years of audit services provided by domestic accounting firms	10
The name of the certified public accountant of the domestic accounting firm	Liu Ge, Wang Xingjie
The number of consecutive years of audit services of the certified public accountant of the domestic accounting firm	3

Whether to change the accounting firm

ÿYesÿNo

Employment of internal control audit accounting firms, financial consultants or sponsors

ÿApplicableÿNot applicable

9. Facing delisting situation after annual report disclosure

ÿApplicableÿNot applicable

X. Matters related to bankruptcy and reorganization

ÿApplicableÿNot applicable

During the reporting period, there were no matters related to bankruptcy and reorganization of the company.

11. Major litigation and arbitration matters

Applicable/Not applicable

The company had no major lawsuits or arbitrations this year.

12. Punishment and rectification

Applicable/Not applicable

There was no punishment and rectification in the reporting period of the company.

XIII. Integrity status of the company and its controlling shareholders and actual controllers

Applicable Not applicable

At the end of the reporting period, the company, its controlling shareholders, and actual controllers had no violations of the law and were not persons subject to enforcement.

14. Significant connected transactions

1. Affiliated transactions related to daily operations

Applicable Not applicable

Related parties	connection relation	Related transaction type	Related transaction content	Pricing Principles for Related Transactions	Related transaction price	Related transaction amount (10,000 yuan)	Proportion to the amount of similar transactions	Approved transaction amount (10,000 yuan)	Is it more than the approved quota	Related Transaction Settlement Method	Available market prices for similar transactions	disclosure date	disclosure index
Beijing Haidian District State-owned Assets	A legal person holding more than 5% of the company's shares	financial aid	Financial Aid Interest	fair market price	5,352.65	5,352.65	46.22 %	5,352.65	no	Payment as agreed in the contract	5,352.65	2019 March 28	Juchao Information Network (www.cninfo.com.cn)
Beijing Haidian District State-owned Assets	The indirect controlling shareholder of the company holds Haixinzhi and Haiguotou Investment Group Co., Ltd. 100%	financial aid	Financial Aid Interest	fair market price	6,227.25	6,227.25	53.78 %	6,227.25	no	Payment as agreed in the contract	6,227.25	2021 February 10th	Juchao Information Network (www.cninfo.com.cn)
State-owned assets of Haidian District, Beijing	controlling shareholder of the joint-stock company,	Guarantee fee	Guarantee fee	fair market price	1,015.24	1,015.24	100.00 %	1,015.24	no	Payment as agreed in the contract	1,015.24		

	Investment Group Co., Ltd.	Holds Hai Guotou 100% shares											
Beijing Haidian Technology Development Co., Ltd.	Mr. Liu Lei, director of the company, serves as its director	lease	Housing rental fee	fair market price	10.2988 million yuan	1,029 .88	46.66 %	1,029 .88	no	Payment as agreed in the contract	10.2988 million yuan	2021 January 30	Juchao Information Network (www.cninfo.com.cn)
Beijing Haixinyu Urban Renewal	Enterprises controlled by the same actual controller	lease	Housing rental fee	fair market price	383.60 million	383.60	17.38 %	383.60	no	Payment as agreed in the contract	383.60 million	2022 September 24	Juchao Information Network (www.cninfo.com.cn)
	Company partner	Sales of goods		fair market price	66.55 ten thousand yuan	66.55 0.01%	66.55 No			Payment as agreed in the contract	66.55 ten thousand yuan		
	Company partner	Sale	Technical Services	fair market price	56.60 ten thousand yuan	56.60 0.16%	56.60 No			Payment as agreed in the contract	56.60 ten thousand yuan		
	Company partner	Corporation	Cooperative operation	fair market price	90 million yuan	9,000 .00	100.00 %	9,000 .00	no	Contract expired refund	90 million yuan		
	Construction Development Co., Ltd. Hebi Huashi United Energy Technology Co., Ltd.												
total						5,131 .77		5,131 .77					
Details of large-value sales returns				none									
Estimated the total amount of daily related party transactions that will occur in the current period by category, the actual performance during the reporting period (if any)				none									
The reason for the large difference between the transaction price and the market reference price (if applicable)				not applicable									

2. Affiliated transactions in the acquisition and sale of assets or equity

ApplicableNot applicable

During the reporting period, there was no related transaction of asset or equity acquisition or sale.

3. Affiliated transactions of joint foreign investment

ApplicableNot applicable The

company did not have any related transactions of joint external investment during the reporting period.

4. Related claims and debts

Applicable Not applicable

Whether there are non-operating related creditor's rights and debts

Yes No

Claims receivable from related parties

Reasons for the formation of the related party relationship	Whether there is non-operating capital occupation	Balance at the beginning of the period (10,000 yuan)	Amount added in this period (10,000 yuan)	Amount recovered in the current period (10,000 yuan)	Interest rate	Interest for the current period (10,000 yuan)	Ending balance (10,000 yuan)
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Debts payable to related parties

Reasons for the formation of the related party relationship	Balance at the beginning of the period (10,000 yuan)	Amount added in this period (10,000 yuan)	Amount repaid in this period (10,000 yuan)	Interest rate	Interest for the current period (10,000 yuan)	Ending balance (10,000 yuan)
Beijing Haidian District State-owned Assets Investment Management Co., Ltd.	A legal person holding more than 5% of the company's shares	Financial assistance 83,167.82	5,352.65	1,616.49	6.80%	5,352.65 86,903.98
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	The indirect controlling shareholder of the company holds 100% shares of Haixinzhi and Haiguotou	Financial assistance 47,143.67	268,315.25	215,347	6.80%	6,227.25 100,111.92

5. Contacts with financial companies that have affiliated relationships

ApplicableNot applicable There

is no deposit, loan, credit or other financial business between the company and the financial company that has a related relationship and related parties.

6. Communications between financial companies controlled by the company and related parties

ApplicableNot applicable

There is no deposit, loan, credit or other financial business between the financial company controlled by the company and related parties.

7. Other major related transactions

ApplicableNot applicable

The company had no other major related transactions during the reporting period.

15. Significant contracts and their performance

1. Matters concerning trusteeship, contracting and leasing

(1) Hosting situation

ÿApplicableÿNot applicable

There was no trusteeship in the reporting period of the company.

(2) Contract status

ÿApplicableÿNot applicable

There was no contracting situation in the reporting period of the company.

(3) Lease situation

ÿ Applicable ÿ Not applicable

Lease Description

(1) In December 2019, Daqing Sanju, the company's holding subsidiary, signed a "financial lease contract (leaseback)" with Chongqing Yuyu Financial Leasing Co., Ltd.

The leased property is part of the production equipment of Daqing Sanju, the total price of the leased property is 200 million yuan, and the lease term is 3 years. In December 2022, agreed and confirmed by all parties to the contract

The maturity date of the creditor's rights under the original "financial lease contract (leaseback)" will be extended to June 2023.

(2) In October 2020, Shandong Sanju, a holding subsidiary of the company, signed a "financial lease contract (sale and leaseback)" with Hubei Financial Leasing Co., Ltd.

The leased property is part of the production equipment of Shandong Sanju, the total price of the leased property is 110 million yuan, and the lease term is 3 years.

(3) In October 2020, the company's holding subsidiary Shandong Sanju signed a "financial lease contract (direct lease)" with Sinomach Financial Leasing Co., Ltd. suppliers and

The leased items are selected by Shandong Sanju Company, purchased by Sinomach Financial Leasing Co., Ltd. from suppliers, and then leased to Shandong Sanju Company for use. lease

The total price of the property is 11.073 million yuan, and the lease period is 3 years.

(4) In June 2021, Sanju Jiajing, a subsidiary of the company, signed a contract with Zhengzhou Yunhai Hengxing Technology Co., Ltd. on "5000Nm3/h nitrogen and 2000Nm3/h instrument air

Sub-nitrogen production device leasing contract". The leased device was constructed by Zhengzhou Yunhai Hengxing Technology Co., Ltd. according to the requirements of Sanju Jiajing, and leased to Sanju Jiajing for use. The total price of

the leased object is 37.50 million yuan, and the lease period is 5 years.

(5) In August 2021, Shandong Sanju, the company's holding subsidiary, signed a "financial lease contract (sale and leaseback)" with Huaxu International Financial Leasing Co., Ltd.

The leased property is part of the production equipment of Shandong Sanju, and the total price of the leased property is RMB 48,000,000. According to the actual loan situation as of the end of December 2022, the lease period is

54 months.

(6) In August 2021, the company's holding subsidiary Shandong Sanju signed a "financial lease contract (direct lease)" with Huaxu International Financial Leasing Co., Ltd. The suppliers and leased objects are selected by Shandong

Sanju Company, Huaxu International Financial Leasing Co., Ltd. purchases them from suppliers, and then leases the leased objects to Shandong Sanju Company for use. The total price of the leased property is 46.9991 million yuan, and

the lease term is 3.5 years.

(7) In December 2021, Shandong Sanju, the company's holding subsidiary, signed a "financial lease contract (sale and leaseback)" with Great Wall Guoxing Financial Leasing Co., Ltd.

The leased property is part of the fixed assets of Shandong Sanju, the total price of the leased property is 500 million yuan, and the lease term is 24 months.

(8) In May 2022, Shandong Sanju, the company's holding subsidiary, signed a "financial lease contract (after-sale leaseback)" with China Railway Construction Financial Leasing Co., Ltd. The leased item is part of the production

equipment of Shandong Sanju, and the total price of the leased item is It is 200 million yuan, and the lease term is 60 months.

(9) In May 2022, the company's holding subsidiaries Meifang Coking and Sichuan Xinda jointly signed a "Leaseback Lease Contract" with Great Wall Guoxing Financial Leasing Co., Ltd.

The leased object is part of the production equipment of Meifang Coking and Sichuan Xinda. The total price of the leased object is 450 million yuan, and the lease period is 24 months.

unit: yuan

project	original book value	accumulated depreciation	Provision for impairment	Book value
Part of the production equipment of Daqing Sanju	469,020,419.07	380,744,138.17		88,276,280.90
Part of the production equipment of Sanju Jiaying	33,341,881.99	3,167,478.84		30,174,403.15
Part of the production equipment of Shandong Sanju	1,095,178,013.50	131,069,644.94		964,108,368.56
Meifang Coking and some production equipment of Sichuan Xinda	549,774,303.25	126,370,578.08		423,403,725.17
total	2,147,314,617.81	641,351,840.03	-	1,505,962,777.78

(10) In 2022, the company signed the "House Lease Contract" with Beijing Haixinyu Urban Renewal Construction and Development Co., Ltd.

Co., Ltd. rents a house for daily office work. The lease period is from September 8, 2022 to June 30, 2023; the rent standard is RMB 8 / day / building

square meters.

Projects that bring profit or loss to the company amount to more than 10% of the company's total profit in the reporting period

ApplicableNot applicable

During the reporting period of the company, there was no leasing project whose profit or loss for the company reached more than 10% of the total profit of the company during the reporting period.

2. Major guarantee

Applicable Not applicable

Unit: ten thousand yuan

External guarantees of the company and its subsidiaries (excluding guarantees for subsidiaries)										
Guarantee name	Disclosure date of announcements related to guarantee amount	Guarantee amount	actual date of occurrence	Actual guarantee amount	Guarantee type	Collateral (if any)	Counter guarantee (if any)	Guarantee period	Is it fulfilled	Whether to guarantee for related parties
Penglai Jutal Offshore Engineering Heavy	May 20, 2020	30,000	August 31, 2020	5,500		none	none	3 years no		no
Industry Co., Ltd. Penglai Jutal	May 20, 2020	30,000	June 04, 2021	6,600		none	none	21 months no		no
Offshore Engineering Heavy Industry Co.,	December 25, 2017	45,000	March 1, 2018	3,910		none	none	82 months no		no
Ltd. Zhuhai Jutal Offshore Oil Service Co.,	December 25, 2017	45,000	May 07, 2018	3,910		none	none	80 months no		no
Ltd. Zhuhai Jutal Offshore Oil Service Co., Ltd. Total amount of external guarantees approved during the reporting period	¥A1¥			Total actual amount of external guarantees approved during the reporting period	¥A2¥					0
Total amount of external guarantees approved at the end of the reporting period	¥A3¥	75,000		Total actual external guarantee balance at the end of the reporting period	¥A4¥					19,920

Guarantees provided by the company to its subsidiaries										
Guarantee name	Disclosure date of announcements related to guarantee amount	Guarantee amount	actual date of occurrence	Actual guarantee amount	Guarantee type	Collateral (if any)	Counter guarantee (if any)	Guarantee period	Is it fulfilled	Whether to guarantee for related parties
Shenyang Sanju Catalyst Co., Ltd.	December 01, 2020	15,000	March 12, 2021	4,900		none	none	1 year whether		
Shenyang Sanju Catalyst Co., Ltd.	December 01, 2020	14,900	January 07, 2021	5,000		none	none	1 year whether		
Shenyang Sanju Catalyst Co., Ltd.	December 01, 2020	14,900	February 04, 2021	5,000		none	none	1 year whether		
Shenyang Sanju Catalyst Co., Ltd.	December 01, 2020	14,900	February 22, 2021	4,900		none	none	1 year whether		
Inner Mongolia Sanju Jiajing New Energy Co., Ltd.	August 26, 2016, June 29, 2022	17,000	September 23, 2016	14,000	Mortgage	The company holds the equity of Sanju Jiajing, Sanju Jiajing real estate and	none	10 years no		no
Inner Mongolia Sanju Jiajing New Energy Co., Ltd.	May 20, 2020	8,000	June 17, 2021	6,000	Mortgage	machinery equipment company holds the equity of Sanju Jiajing, Sanju Jiajing real	none	1 year whether		
Inner Mongolia Sanju Jiajing New Energy Co., Ltd.	June 29, 2022	6,000	June 29, 2022	6,000	Mortgage	estate and machinery equipment company holds the equity of Sanju Jiajing, Sanju Jiajing real estate, machinery and equipment	none	1 year no		no
Wuhan Jinzhong Engineering Technology Co., Ltd.	September 25, 2020	5,500	February 01, 2021	350	Mortgage	Wuhan Jinzhong Real Estate	Beijing Huashi United Energy Technology	1 year whether		
Wuhan Gold	2020 5,500 2021				Development Co., Ltd.	provides counter-guarantee	224 Mortgage	Wuhan Gold Beijing Hua	for 1 year	

China Engineering Technology Co., Ltd.	September 25th		Feb 01			Zhongfangshi United Energy Technology				
Wuhan Jinzhong Engineering Technology Co., Ltd.	September 25, 2020	5,500	March 26, 2021		230 Mortgage	Wuhan Jinzhong Real Estate		1 year whether		
Wuhan Jinzhong Engineering Technology Co., Ltd.	September 25, 2020	5,500	May 27, 2021		380 Mortgage	Wuhan Jinzhong Real Estate		1 year whether		
Wuhan Jinzhong Engineering Technology Co., Ltd.	November 12, 2021	5,500	February 23, 2022	1,000	Mortgage	Wuhan gold mid-level real estate, should Receipt		1 year no		no
Wuhan Jinzhong Engineering Technology Co., Ltd.	November 12, 2021	5,500	August 10, 2022	1,000	Mortgage	Wuhan gold mid-level real estate, should Receipt		1 year no		no
Inner Mongolia Meifang Coal Coking Co., Ltd.	August 13, 2022	5,000	August 30, 2022		5,000 Mortgage	American coking equipment		1 year no		no
Inner Mongolia Meifang Coal Coking Co., Ltd.	August 13, 2022	10,000	September 05, 2022		2,500 Mortgage	American coking equipment, real estate and land		1 year no		no
Inner Mongolia Meifang Coal Coking Co., Ltd.	August 13, 2022	10,000	September 06, 2022		5,465 pledged	American coking equipment, real estate and land		1 year no		no
Inner Mongolia Meifang Coal Coking Co., Ltd.	August 13, 2022	10,000	September 9, 2022		2,035 pledged	American coking equipment, real estate and land	Development Co., Ltd. provides a counter guarantee Beijing Huashi United Energy Technol	1 year no		no

Shandong Sanju Bioenergy Co., Ltd.	December 30, 2020	10,000	February 01, 2021	2,000		none	Guarantee Juxian Jinmao Asset Management Co., Ltd. provides	1 year whether		
Shandong Sanju Bioenergy Co., Ltd.	December 30, 2020	10,000	February 09, 2021	1,850		none	a counter-guarantee Juxian Jinmao Asset Management Co., Ltd. provides a counter-guarantee	1 year whether		
Shandong Sanju Bioenergy Co., Ltd.	December 06, 2021	50,000	March 04, 2022	31,976.64		Haiguo Investment Group credit guarantee, 50 million shares of Heilongjiang Haiguo Longyou Petrochemical Co., Ltd.	The company offers a counter-guarantee	2 years no		yes
Shandong Sanju Bioenergy Co., Ltd.	December 10, 2021	20,000	May 24, 2022	18,232.63		Hai Guotou Group Credit Guarantee	The company offers a counter-guarantee	5 years no		yes
Inner Mongolia Meifang Coal Coking Co., Ltd.	January 04, 2022	10,000		0		none	Beijing Yize Sunshine Industry Co., Ltd. provides a counter-	1 year no		no
Inner Mongolia Meifang Coal Coking Co., Ltd.	April 08, 2022	7,000		0		none	guarantee Beijing Yize Sunshine Industry Co., Ltd. provides a counter-guarantee	1 year no		no
Shenyang Sanju Kate Catalyst Co., Ltd.	October 28, 2022	15,000	October 31, 2022	12,845.39		none	none	From the effective date of the letter of guarantee to one month after the delivery of the purchased goods to Zhejiang Petrochemical, and no later than August 30, 2023	no	no
Wuhan Jinzhong Engineering Technology Co., Ltd.	December 16, 2022	5,500		0		Wuhan gold middle ground, house produce, should	Beijing Huashi United Energy Technology Development Co., Ltd.		no	no

						Accounts Collecting Ltd. offers a	counter-guarantee			
The total amount of guarantees approved for subsidiaries during the reporting period ¥B1¥		75,500		Total actual amount of guarantees for subsidiaries during the reporting period (B2)		86,054.66				
Total approved guarantee amount for subsidiaries at the end of the reporting period (B3)		241,000		Total actual guarantee balance for subsidiaries at the end of the reporting period ¥B4¥		100,054.66				
Guarantees from subsidiaries to subsidiaries										
Guarantee name	Disclosure date of announcements related to guarantee amount	Guarantee amount	actual date of occurrence	Actual guarantee amount	Guarantee type	Collateral (if any)	Counter guarantee (if any)	Guarantee period	Is it fulfilled	Whether to guarantee for related parties
The total amount of company guarantees (that is, the total of the first three items)										
Total approved guarantee amount during the reporting period ¥A1+B1+C1¥		75,500		Total actual amount of guarantees incurred during the reporting period ¥A2+B2+C2¥		86,054.66				
Total approved guarantee amount at the end of the reporting period ¥A3+B3+C3¥		316,000		Total actual guarantee balance at the end of the reporting period ¥A4+B4+C4¥		119,974.66				
The ratio of the actual total guarantee (ie A4+B4+C4) to the company's net assets				17.07%						
Of which:										
The debt guarantee balance (E) provided directly or indirectly for the guaranteed object whose asset-liability ratio exceeds 70%				54,059.27						
The amount of the total guarantee exceeding 50% of the net assets (F)				0						
The total amount of the above three guarantees (D+E+F)				54,059.27						
For the unexpired guarantee contract, the statement on the occurrence of guarantee liability during the reporting period or the evidence showing that it may assume joint and several liability for liquidation (if any)				none						
The statement on the provision of guarantee in violation of the prescribed procedures (if any)				none						

Specific explanations for the use of composite guarantees

none

3. Entrusting others to manage cash assets

(1) Entrusted financial management

¥Applicable¥Not applicable The company

did not have entrusted financial management during the reporting period.

(2) Entrusted loans

¥Applicable¥Not applicable

There was no entrusted loan in the reporting period of the company.

4. Other major contracts

√Applicable/Not applicable

There were no other major contracts in the reporting period of the company.

XVI. Explanation of other important matters

√Applicable/Not applicable

There are no other significant events that need to be explained during the reporting period of the company.

17. Significant events of the company's subsidiaries

√ Applicable √ Not applicable

1. On September 23, 2022, the 34th meeting of the 5th Board of Directors held by the company reviewed and approved the "About the Plan to Transfer the Wholly-owned Subsidiary Bei

Proposal on 100% equity of Beijing Sanju Green Energy Technology Co., Ltd., agreeing that the company transfers 100% equity of Sanju Green Energy, a wholly-owned subsidiary. For details, please refer to September 2022

On the 24th, October 31st, 2022, and January 10th, 2023, it was disclosed on the information disclosure website designated by the China Securities Regulatory Commission on the ChiNext Market

Announcement on Transferring 100% Equity of Beijing Sanju Green Energy Technology Co., Ltd.

Announcement on the Progress of 100% Equity of Sanju Green Energy Technology Co., Ltd. (Announcement No.: 2022-083), "About Listing and Transfer of Wholly Owned Subsidiary Beijing Sanju Green Energy Technology

Announcement on Progress of 100% Equity of Limited Company (Announcement No.: 2023-001);

2. On September 23, 2022, the 34th meeting of the fifth session of the board of directors held by the company considered and approved the "About the Plan to Transfer the Holding Subsidiary Black Company by Listing".

Longjiang Sanju Beidahuang Biomass New Material Co., Ltd. Proposal on 52% Equity, agreeing that the company transfers its holding subsidiary Heilongjiang Sanju Beidahuang Biomass New Material Co., Ltd.

Material Co., Ltd. 52% equity. For details, please refer to September 24, 2022, October 31, 2022, December 2, 2022, and January 20, 2023

Disclosed on the information disclosure website designated by the China Securities Regulatory Commission on the Growth Enterprise Market, the "Announcement on the proposed transfer of 52% equity of the holding subsidiary

Heilongjiang Sanju Beidahuang Biomass New Material Co., Ltd. Transferred holding subsidiary Heilongjiang Sanju Beidahuang Biomass New Material Co., Ltd.

Announcement on Progress of 52% Equity of the Company" (Announcement No.: 2022-084), "About Listing and Transfer of Holding Subsidiary Heilongjiang Sanju Beidahuang Biomass New Materials Co., Ltd.

Announcement on the Progress of 52% Equity of the Company" (Announcement No.: 2022-088), "Announcement on the Progress of Listed Transfer of Subsidiary Equity" (Announcement No.: 2023-

008)

3. On September 23, 2022, the 34th meeting of the fifth session of the board of directors held by the company reviewed and approved the "Proposal on the proposed transfer of 100% equity of the wholly-owned subsidiary

Nanjing Sanju Biomass New Material Technology Co., Ltd. through listing" Proposal", agreeing that the company transfers its wholly-owned subsidiary Nanjing Sanju Biomass New Material Technology Co., Ltd.

100% equity of the company. For details, please refer to the disclosures on September 24, 2022, October 31, 2022, November 30, 2022, and January 20, 2023.

The China Securities Regulatory Commission's GEM-designated information disclosure website "About the proposed transfer of 100% shares of Nanjing Sanju Biomass New Material Technology Co., Ltd., a wholly-owned subsidiary, through listing"

Announcement on the Rights of the Company" (Announcement No.: 2022-069), "Progress on Listing and Transferring 100% Equity of Nanjing Sanju Biomass New Material Technology Co., Ltd., a wholly-owned subsidiary

Announcement" (Announcement No.: 2022-082), "Announcement on the Progress of Listing and Transferring 100% Equity of Nanjing Sanju Biomass New Material Technology Co., Ltd." (Announcement No.: 2022-086),

"About Listing and Transferring Subsidiary Announcement on the progress of the company's equity (announcement number: 2023-008);

4. On October 14, 2022, the thirty-sixth meeting of the fifth session of the board of directors held by the company reviewed and approved the "About the Plan to Transfer the Holding Subsidiary Bei

Proposal on 80.0235% Equity of Beijing Sanju Luyuan Co., Ltd., agreeing that the company transfers 80.0235% equity of its holding subsidiary Sanju Luyuan. For details, see

On October 14, 2022, November 25, 2022, December 2, 2022, and January 20, 2023, it will be disclosed in the China Securities Regulatory Commission's GEM designated information disclosure

The "Announcement on the Plan to Transfer 80.0235% of the Equity of the Holding Subsidiary Beijing Sanju Luyuan Co., Ltd. by Listing" (Announcement No.: 2022-075), "About the Listing and Transfer of 80.0235%

of the Equity of the Holding Subsidiary Beijing Sanju Luyuan Co., Ltd." "Progress Announcement" (Announcement No.: 2022-085), "Guarantee

Announcement on the Progress of Listed Transfer of 80.0235% Equity of Holding Subsidiary Beijing Sanju Luyuan Co., Ltd. (Announcement No.: 2022-087),

Announcement on the progress of the company's equity (announcement number: 2023-008).

Section 7 Changes in Shares and Information on Shareholders

1. Changes in shares

1. Changes in shares

Unit: share									
	Before this change		Increase or decrease in this change (+, -)					After this change	
	Issuance of new shares and bonus shares	in proportion to the number of shares	Provident fund transfer	Other subtotal ratios					
1. Shares subject to sales restrictions	20,123,871	0.86%	0	0	0	-299,475	-299,475	19,824,396	0.84%
1. State shareholding	0	0.00%	0	0	0	0	0	0	0.00%
2. Shares held by state-owned legal persons	0	0.00%	0	0	0	0	0	0	0.00%
3. Other domestic shares	20,123,871	0.86%	0	0	0	-299,475	-299,475	19,824,396	0.84%
Including: shares held by domestic legal persons and shares held by domestic natural persons	0	0.00%	0	0	0	0	0	0	0.00%
4. Foreign shareholding	0	0.00%	0	0	0	0	0	0	0.00%
Including: foreign legal person holding shares	0	0.00%	0	0	0	0	0	0	0.00%
Shares held by foreign natural persons	0	0.00%	0	0	0	0	0	0	0.00%
2. Shares not subject to sales restrictions	2,329,596,431	99.14%	0	0	0	299,475	299,475	2,329,895,906	99.16%
1. RMB ordinary shares	2,329,596,431	99.14%	0	0	0	299,475	299,475	2,329,895,906	99.16%
2. Domestic listed foreign shares	0	0.00%	0	0	0	0	0	0	0.00%
3. Listed overseas	0	0.00%	0	0	0	0	0	0	0.00%

foreign shares									
4. Others	0	0.00%	0	0	0	0	0	0	0.00%
3.									
Total number of shares	2,349,72 0,302	100.00%	0	0	0	0	0	2,349,72 0,302	100.00%

Reason for Share Change

ÿApplicableÿNot applicable

Approval status of shareholding changes

ÿApplicableÿNot applicable

Transfer status of share changes

ÿApplicableÿNot applicable

The impact of shareholding changes on financial indicators such as basic earnings per share, diluted earnings per share, and net assets per share attributable to ordinary shareholders of the company in the last year and the latest period

ÿApplicableÿNot applicable

Other content that the company deems necessary or required by securities regulators to disclose

ÿApplicableÿNot applicable

2. Changes in restricted shares

ÿ Applicable ÿ Not applicable

Unit: share

Name of shareholder	Number of restricted shares at the beginning of the period	Increase the number of restricted shares in this period	Number of shares released from selling restrictions in the current period	The number of restricted shares at the end of the period	The reason for the restriction	The release date of the restriction
Liu Lei	18,244,493	0	0	18,244,493 executives locked shares		During the term of office, the regulations on sales
Cao Huafeng	1,248,025	0	-300,000	948,025 Executive Locked Shares		restriction of directors, supervisors and senior
Sun Yanhong	631,353	0	0	631,353 Executive Locked Shares		managers are implemented.
Bian Jiangrong	0	525	0	525 Executive Locked Shares		
total	20,123,871	525	-300,000	19,824,396		

2. Securities Issuance and Listing

1. Securities issuance (excluding preferred shares) during the reporting period

ÿApplicableÿNot applicable

2. Explanation on changes in the total number of shares of the company and the structure of shareholders, and changes in the structure of the company's assets and liabilities

ÿApplicableÿNot applicable

3. Existing internal employee shares

ApplicableNot applicable

3. Shareholders and actual controllers

1. Number of shareholders and shareholding status of the company

Unit: share

Total number of ordinary shareholders at the end of the reporting period	45,841	The total number of ordinary shareholders at the end of the previous month before the annual report disclosure date	45,272	Total number of preferred shareholders with voting rights restored at the end of the reporting period (if any) (see note 9)	0	The total number of preferred shareholders whose voting rights have been restored at the end of the previous month before the annual report disclosure date (if any) (see Note 9)	0	Total number of shareholders holding special voting shares (if any)	0
Shareholdings of shareholders holding more than 5% of the shares or the top 10									
shareholder name	Nature of shareholders	Shareholding ratio	Number of shares held at the end of the reporting period	Changes during the reporting period	shareholders The number of restricted shares held	The number of shares that are not subject to sales restrictions	Pledge, Mark or Freeze Situation		
							Share Status	quantity	
Beijing Haixinzhi Low Carbon Technology Development Co., Ltd.	State-owned legal person	29.48%	692,632,562	0	0	692,632,562	pledge	224,960,000	
Co., Ltd. Beijing Haidian District State-owned Assets Investment Management Co., Ltd.	State-owned legal person	5.74%	134,908,721	0	0	134,908,721			0
Beijing Zhongheng Tianda Technology Development Co., Ltd.	Domestic non-state-owned legal person	4.53%	106,485,951	0	0	106,485,951	pledge	34,098,458	
Zhang Xueling	Domestic natural person	1.50%	35,339,874	0	0	35,339,874	pledge	32,456,990	
HKSCC	Foreign legal person	1.14%	26,717,023	1,277,989	0	26,717,023			0
Liu Lei	Domestic natural person	1.04%	24,325,991	0	18,244,493	6,081,498	pledge	24,325,991	
Shanghai Silver Leaf Investment Co., Ltd. - silver	other	0.95%	22,396,056	7,428,800	0	22,396,056			0

Ye Hongyu No. 3 Private Securities Investment Fund								
Lin Ke	Domestic natural person	0.68%	15,870, 902	0	0	15,870, 902	pledge	15,870,902
Beijing Renren Zhongke Technology Trade Co., Ltd.	Domestic non- state-owned legal person	0.66%	15,544, 527	0	0	15,544, 527		0
Liu Xiao	Domestic natural	0.63%	14,886, 186	1,310,8 92	0	14,886, 186		0
person strategic investors or general legal persons becoming the top 10 shareholders due to allotment of new shares (if any) (see Note 4)		none						
Explanation on the related relationship or concerted action of the above-mentioned shareholders		1. Beijing Haixinzhi Low Carbon Technology Development Co., Ltd. and Beijing Haidian District State-owned Assets Investment Management Co., Ltd. are persons acting in concert; 2. Lin Ke and Zhang Xueling are spouses; 3. It is unknown whether there is any related relationship between the remaining shareholders Or a person acting in concert as stipulated in the "Administrative Measures for the Disclosure of Information on Changes in Shareholding of Shareholders of Listed Companies".						
Explanation on the entrusted/entrusted voting rights and waiver of voting rights of the above-mentioned shareholders		none						
Special instructions for repurchase accounts among the top 10 shareholders (if any) (see Note 10)		none						
Shareholdings of the top 10 shareholders not subject to sales restrictions								
shareholder name	Number of unrestricted shares held at the end of the reporting period	Type of shares						
		Type of shares	quantity					
Beijing Haixinzhi Low Carbon Technology Development	692,632,562 RMB ordinary shares		692,632,562					
Co., Ltd. Beijing Haidian District State-owned Assets Investment	134,908,721 RMB ordinary shares		134,908,721					
Management Co., Ltd. Beijing Zhongheng Tianda	106,485,951 RMB ordinary shares		106,485,951					
Technology	35,339,874 RMB ordinary shares		35,339,874					
Development Co., Ltd. Zhang Xueling	26,717,023 RMB ordinary shares		26,717,023					
Hong Kong Securities Clearing Co., Ltd. Shanghai YinYe Investment Co., Ltd. - YinYe	22,396,056 RMB ordinary shares		22,396,056					
Hongyu	15,870,902 RMB ordinary shares		15,870,902					
No. 3 private equity securities investment fund	15,544,527 RMB ordinary shares		15,544,527					
Lin Ke	14,886,186 RMB ordinary shares		14,886,186					
Beijing Renren Zhongke Technology Trade Co., Ltd. Liu Xiao Agricultural Bank of China Co., Ltd. - among the top	13,706,845 RMB ordinary shares		13,706,845					
10 shareholders of non-restricted tradable shares of China Securities 500	1. Beijing Haixinzhi Low Carbon Technology Development Co., Ltd. and Beijing Haidian District State-owned Assets Investment Management Co., Ltd. are persons acting in concert; 2. Lin Ke and Zhang Xueling are spouses; 3. It is unknown whether there is any related relationship between the remaining shareholders Or belong to the "shareholders of listed companies							

Explanation on the associated relationship or concerted action between the top 10 shareholders of unrestricted tradable shares and the top 10 shareholders	Persons acting in concert as stipulated in the Measures for the Administration of Information Disclosure of Changes in Shareholdings.
Description of shareholders participating in margin financing and securities lending business (if any) (see Note 5)	1. In addition to holding 34,098,458 shares through an ordinary securities account, Beijing Zhongheng Tianda Technology Development Co., Ltd., a shareholder of the company, also holds 72,387,493 shares through a securities company's customer credit transaction guarantee securities account, actually holding a total of 106,485,951 shares; 2. Shareholders of the company Shanghai Yinze Investment Co., Ltd. - Yinze Hongyu No. 3 Private Equity Securities Investment Fund holds 37,210 shares through the ordinary securities account, and also holds 22,358,846 shares through the securities company's client credit transaction guarantee securities account, actually holding 22,396,056 shares in total; 3. In addition to holding 175,200 shares through an ordinary securities account, Liu Xiao, a shareholder of the company, also holds 14,710,986 shares through a securities company's customer credit transaction guarantee securities account, actually holding 14,886,186 shares in total.

Whether the company has a voting rights differential arrangement

ÿApplicableÿNot applicable

Whether the company's top 10 ordinary shareholders and top 10 unrestricted ordinary shareholders conducted agreed repurchase transactions during the reporting period

ÿYesÿNo

The company's top 10 ordinary shareholders and top 10 unrestricted ordinary shareholders did not conduct agreed repurchase transactions during the reporting period.

2. Information about the controlling shareholder of the company

Nature of controlling shareholder: Local state-owned controlling

Type of controlling shareholder: legal person

Controlling shareholder name	Legal representative/head of the unit	Date of establishment	Organization Code	Main business
Beijing Haixinzhi Low Carbon Technology Development Co., Ltd.	Wang Teng	September 13, 2021	91110108MA04F5JL9K	Energy-saving technology promotion and technical services; economic and trade consulting; enterprise management; enterprise management consulting. (Market entities independently select business projects and carry out business activities according to the law; projects subject to approval according to law, after approval by relevant departments, carry out business activities in accordance with the approved content; they are not allowed to engage in business activities of projects prohibited and restricted by the industrial policies of the state and this city.)
Equity of other domestic and foreign listed companies held by controlling shareholders and held shares during the reporting period	none			

Changes in controlling shareholders during the reporting period

ÿApplicableÿNot applicable

During the reporting period, the controlling shareholder of the company remained unchanged.

3. The actual controller of the company and its persons acting in concert

Nature of actual controller: local state-owned assets management agency

Type of actual controller: legal person

Actual controller name	Legal representative/head of the unit	Date of establishment	Organization Code	Main business
State-owned Assets Supervision and Administration of the People's Government of Haidian District, Beijing	not applicable	July 16, 2004 Not applicable		not applicable

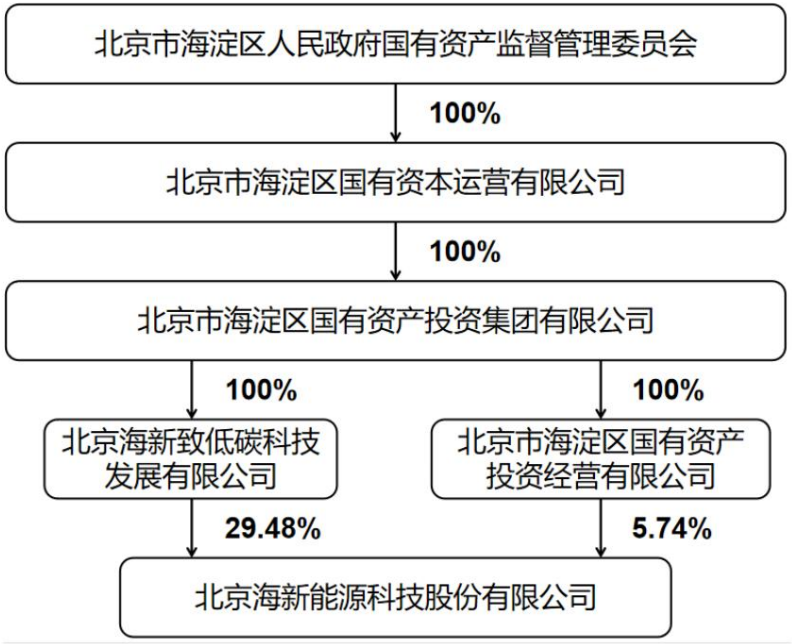
committee				
Equity of other domestic and foreign listed companies controlled by the actual controller during the reporting period	Haidian District State-owned Assets Supervision and Administration Commission holds 51.01% shares of Beijing Cuiwei Building Co., Ltd., 30.00% shares of Beijing Kaiwen Dexin Education Technology Co., Ltd., and 29.98% shares of Beijing Jinji Culture Development Co., Ltd. through its holding company. It holds 14.26% shares of Sinosoft Technology Co., Ltd., 12.59% shares of China High Speed Rail Technology Co., Ltd., and 32.38% shares of Jutal Offshore Oil Service Co., Ltd.			

Changes in the actual controller during the reporting period

ÿApplicableÿNot applicable

The actual controller of the company did not change during the reporting period.

Block diagram of the property rights and control relationship between the company and the actual controller



The actual controller controls the company through trust or other asset management methods

ÿApplicableÿNot applicable

4. The accumulative number of pledged shares of the company's controlling shareholder or the largest shareholder and its persons acting in concert accounts for 80% of the company's shares held by it

ÿApplicableÿNot applicable

5. Other legal person shareholders holding more than 10% of the shares

ÿApplicableÿNot applicable

6. Controlling shareholders, actual controllers, reorganization parties and other commitment subjects shareholding restrictions and reductions

ÿApplicableÿNot applicable

4. Specific implementation of share repurchase during the reporting period

Implementation progress of share repurchases

ÿApplicableÿNot applicable

The progress of the implementation of the reduction of repurchased shares by means of centralized bidding transactions

ÿApplicableÿNot applicable

Section VIII Preference Shares Related Information

̣ApplicablẹNot applicable

During the reporting period, the company had no preferred shares.

Section 9 Bond Related Information

ÿ Applicable ÿ Not applicable

1. Corporate bonds

ÿApplicableÿNot applicable The company did not have corporate bonds during the reporting period.

2. Corporate bonds

ÿ Applicable ÿ Not applicable

1. Basic information of corporate bonds

unit: yuan

Bond Name	Bond Abbreviation	Bond Code	Issue Date	Value	Date	Maturity Date	Bond Balance	Interest Rate			In the method of repayment	Trading places
Beijing Sanju Environmental Protection New Materials Co., Ltd. publicly issued renewable corporate bonds (first tranche) to qualified investors in 2019	19 three poly Y1	112899			April 30, 2019	April 30, 2019	April 29, 2022	0.00	7.00%		of principal and interest, if the issuer does not exercise the right to defer the payment of interest, the interest is paid once a year, and the principal is repaid at one time when it is due. The last installment of interest is paid together with the repayment of the principal.	Shenzhen Stock Exchange
Investor Suitability Arrangements (if any)					The centralized bidding system of the Shenzhen							
Applicable transaction mechanism					Stock Exchange and the bilateral listing transaction on the comprehensive agreement trading platform are only issued to qualified investors							
Whether there is a risk of terminating listing transactions (if any) and countermeasures					none							

overdue bonds

ÿApplicableÿNot applicable

2. The triggering and implementation of issuer or investor option clauses and investor protection clauses

ÿ Applicable ÿ Not applicable

"19 Sanju Y1" renewable corporate bonds have the issuer's renewal option: every 3 interest-bearing years of the bond is a cycle, and at the end of each cycle, the issuer has the right to choose to extend the term of the current bond 1 cycle (that is, an extension of 3 years), or choose to redeem the bonds in full at the end of the cycle. During the reporting period, the issuer did not involve exercise of the option.

3. The situation of intermediaries

Bond project name	Intermediary agency name	Office address	Signature	accountant name	Intermediary agency contact number		
19 Trimeric Y1 (112899)	Minsheng Securities Co., Ltd.	Floor 16-18, Building A, Minsheng Financial Center, No. 28 Jianguomen Inner Street, Dongcheng District, Beijing			Luo Siping		010-85127795

Did the above institutions change during the reporting period?

Yes No

4. Use of raised funds

unit: yuan

Bond project name	Total amount of funds raised	Amount used	Amount not used	The operation of the special account for raised funds (if any)	Rectification of illegal use of raised funds (if any)	Whether it is consistent with the purpose, use plan and other agreements promised in the prospectus
19 Trimeric Y1 (112899)	333,000,000. 00	333,000,000. 00	0.00	On April 24, 2022, the company paid "19 Sanju Y1" to the Shenzhen Branch of China Securities Depository and Clearing Co., Ltd. through the Business Department of Beijing Haidian Science and Technology Sub-branch of Bank of Ningbo Co., Ltd. to redeem the principal, interest and handling fees totaling 356,327,815.50 yuan, "19 Sanju Y1" will complete the payment of interest and delisting on May 5, 2022. On July 15, 2022, the raised funds deposit account will be closed.	none	yes

Funds raised for construction projects

Applicable Not applicable

During the reporting period, the company changed the use of funds raised from the above bonds

Applicable Not applicable

5. Adjustment of credit rating results during the reporting period

Applicable Not applicable

6. Implementation and changes of guarantees, debt repayment plans and other debt repayment guarantee measures during the reporting period and their impact on the rights and interests of bond investors

☐ Applicable ☐ Not applicable

During the reporting period, "19 Sanju Y1" expired on May 5, 2022, and the interest has been fully paid and delisted. For details, please refer to the company's announcement to the China Securities Regulatory Commission on April 25, 2022

"Beijing Sanju Environmental Protection New Materials Co., Ltd. publicly issued renewable corporate bonds to qualified investors in 2019" disclosed by the designated information disclosure website of the GEM (Phase 1) 2022 Principal and Interest Payment and Delisting Announcement" (Announcement No.: 2022-035).

During the reporting period, the guarantee, debt repayment plan and other debt repayment guarantee measures of the "19 Sanju Y1" renewable corporate bonds remained unchanged. During the reporting period, the company strictly followed the

The disclosed "19 Sanju Y1" renewable corporate bond related debt repayment plan and implementation of debt repayment guarantee measures are consistent with the relevant commitments in the prospectus.

3. Debt financing instruments of non-financial enterprises

☐ Applicable ☐ Not applicable During

the reporting period, the company did not have non-financial corporate debt financing instruments.

4. Convertible corporate bonds

☐ Applicable ☐ Not applicable

During the reporting period, the company did not have any convertible corporate bonds.

5. During the reporting period, the loss in the scope of consolidated statements exceeded 10% of the net assets at the end of the previous year

☐ Applicable ☐ Not applicable

6. Overdue interest-bearing debts other than bonds at the end of the reporting period

☐ Applicable ☐ Not applicable

7. Whether there is any violation of rules and regulations during the reporting period

☐ Yes ☐ No

8. The company's main accounting data and financial indicators for the past two years as of the end of the reporting period

Unit: ten thousand yuan

project	At the end of the reporting period	end of last year	Increase/Decrease at the end of the reporting period compared to the end of the previous year
current ratio	0.99	1.15	-13.91%
Assets and liabilities	50.55%	39.97%	10.58%
quick ratio	0.61	0.81	-24.69%
	This reporting period	last year	Increase/Decrease in the reporting period compared with the same period of the previous year
Net profit after deducting extraordinary gains and losses	-84,056.52	421.25	-20,054.07%
EBITDA Total Debt Ratio	-2.09%	13.01%	-15.10%
Interest coverage ratio	-2.00	1.83	-209.29%
Cash Interest Coverage Multiple	-2.15	13.07	-116.45%
EBITDA interest coverage ratio	-0.47	3.72	-112.63%

loan repayment rate	100.00%	100.00%	0.00%
Interest Coverage Ratio	100.00%	100.00%	0.00%

Section 10 Financial Report

1. Audit report

Type of Audit Opinion	standard unqualified opinion
Audit report signing date	April 06, 2023
Auditor name	Reanda Certified Public Accountants (Special General Partnership)
Audit report number	Reanda Shenzi [2023] No. 2089
CPA name	Liu Ge, Wang Xingjie

Audit report text

All shareholders of Beijing Haixin Energy Technology Co., Ltd.:

1. Audit opinion

We have audited the financial statements of Beijing Haixin Energy Technology Co., Ltd. (hereinafter referred to as "Haixin Energy Technology Company"), including the

Consolidated and corporate balance sheets, consolidated and corporate income statements, consolidated and corporate cash flow statements, consolidated and corporate statements of changes in shareholders' equity and related financial statement's footnote.

In our opinion, the attached financial statements have been prepared in accordance with the Accounting Standards for Business Enterprises in all material respects and fairly reflect the December 2022 financial statements of Haixinnengke Company.

The financial position of the merger and the company as of March 31 and the operating results and cash flows of the merger and the company in 2022.

2. The Basis for Forming the Audit Opinion

We have carried out the audit work in accordance with the provisions of the auditing standards for Chinese certified public accountants. "CPA's Responsibilities for the Audit of the Financial Statements" section of the auditor's report

This section further elaborates on our responsibilities under these Codes. In accordance with the Code of Professional Ethics for Chinese Certified Public Accountants, we are independent from Haixinneng and have fulfilled our duties.

Other responsibilities in terms of professional ethics. We believe that the audit evidence we have obtained is sufficient and appropriate, providing a basis for issuing an audit opinion.

3. Key audit matters

Key audit matters are matters that we consider to be the most important in the audit of the financial statements of the current period based on our professional judgment. Response to these matters is consistent with the financial statement

We do not express opinions on these matters independently. We have determined the following matters to be relevant to communicate in the auditor's report:

key audit matters.

(1) Recognition and measurement of operating income:

1. Item description

Haixinnengke's revenue in 2022 will be 8.648 billion yuan, mainly for environmental protection materials and chemical products, hydrocarbon-based biodiesel products, and comprehensive services for the energy industry

etc., the occurrence and completeness of operating income will have a greater impact on Haixinnengke's operating results, so we believe this matter is a key audit matter, and Haixinnengke

The specific confirmation timing of the company's main operating income is as follows: (Please refer to the Notes to the Financial Statements "IV. Important Accounting Policies and Accounting Estimates - 28. Income")

(1) For domestic sales of environmentally friendly materials, chemical products, and hydrocarbon-based biodiesel products, revenue is recognized when the goods are delivered and the receipt confirmation form confirmed by the customer is obtained;

For export sales, the revenue is recognized when the goods are shipped and the customs export declaration form, bill of lading or receipt confirmation is obtained;

(2) Commodity purchase and sale business of energy industry comprehensive service (formerly trade value-added service), the company undertakes commodity purchase, sales

The main risk in the sale, has the right to independently select suppliers and customers according to market conditions, has the right to negotiate pricing for the goods sold, and obtains the customer's settlement after delivery

Single-time revenue recognition;

(3) Equipment sales in the energy industry comprehensive services (formerly fossil energy industry comprehensive services and ecological agriculture and green energy services), if the sales equipment requires

For installation and inspection, before the purchaser accepts the goods and the installation and inspection are completed, the company cannot consider that the control of the goods has been transferred to the customer, and the company will

Revenue is recognized when the customer completes the acceptance check and accepts the product; if the installation procedure is relatively simple, customer acceptance is only a routine procedure and does not affect the company's judgment of the customer

At the time when the control of the product is obtained, the company recognizes the revenue when the company delivers the goods and obtains the receipt confirmation form confirmed by the customer;

(4) Provide patent and technology licensing and service income in comprehensive energy industry services (formerly comprehensive fossil energy industry services and ecological agriculture and green energy services)

Timing of confirmation of income: Confirm income and issue an invoice when the technical list and service completion materials confirmed by the customer are obtained;

(5) Civil engineering installation in the energy industry comprehensive service (formerly fossil energy industry comprehensive service and ecological agriculture and green energy service) according to the image of a project

The progress is divided into several nodes, and each sub-item construction contract is signed. When the project progress reaches the node agreed in the contract, the completion acceptance of the project is carried out, and the customer

Revenue is recognized when the project completion acceptance report issued by the household, the construction unit and the supervisory unit;

(6) Oil and gas facilities manufacturing and comprehensive services are based on the nature of the project and refer to the proportion of the actual accumulated cost to the estimated total cost or the confirmed project quantity

Revenue is recognized in proportion to the estimated total project volume.

2. Audit response

(1) For the revenue recognition of environmentally friendly materials, chemical products, and hydrocarbon-based biodiesel products, the main audit procedures we implement are as follows:

ÿ Assess the design and implementation of Haixinnengke's internal control;

ÿ Adopt sampling method to check the sales contracts, sales invoices, marine

Documents such as customs declaration form for export goods, bill of lading, weight list, settlement statement and receipt confirmation form to assess the authenticity of income;

ÿ For the sales revenue of environmental protection materials, chemical products, and hydrocarbon-based biodiesel products confirmed before and after the balance sheet date of Haixinnengke Company, check the customer's receipt confirmation

Acknowledgments and other documents to assess the integrity of income;

ÿ Evaluate the authenticity and completeness of revenue through various analysis procedures such as revenue fluctuation analysis and gross profit margin analysis in each period.

ÿ On the basis of implementing the above procedures, we conducted interviews with important customers to assess the authenticity of income.

(2) For the revenue recognition of equipment in energy industry comprehensive services (formerly fossil energy industry comprehensive services and ecological agriculture and green energy services), we implement

The main audit procedures of the bank are as follows:

ÿ Assess the design and implementation of Haixinnengke's internal control;

ÿ Adopt a sampling method to check Haixinneng's sales contracts, sales invoices, receipt confirmations and other documents related to equipment income to evaluate the income distribution.

authenticity of life;

Comprehensive services for the energy industry (formerly comprehensive services for the fossil energy industry and ecological agriculture and green energy) confirmed before and after the balance sheet date of Haixinnengke Company

Service), check the customer receipt confirmation form and other documents, and evaluate the completeness of the income;

On the basis of implementing the above procedures, we conducted interviews with important customers to assess the authenticity of income.

(3) For the revenue recognition of civil engineering installation in energy industry comprehensive services (formerly fossil energy industry comprehensive services and ecological agriculture and green energy services),

The main audit procedures we perform are as follows:

Assess the design and implementation of Haixinnengke's internal control;

Adopt sampling method to check whether Haixinnengke Company and energy industry comprehensive service (formerly fossil energy industry comprehensive service and ecological agriculture and green energy service)

sales contracts, sales invoices, and project completion acceptance reports issued by the customer, construction unit, and supervision unit, etc.

Documents to assess the authenticity of the income;

Comprehensive services for the energy industry (formerly comprehensive services for the fossil energy industry and ecological agriculture and green energy) confirmed before and after the balance sheet date of Haixinnengke Company

service), check the sales contract, sales invoice, the project completion acceptance report issued by the customer, the construction unit, and the supervision unit, etc.

documents to assess the integrity of the income;

On the basis of implementing the above procedures, we conducted interviews with important customers to assess the authenticity of income.

(2) Provision for inventory decline:

1. Item description

As of December 31, 2022, as stated in the notes to the financial statements of Haixinnengke Company "6. Notes to Consolidated Financial Statement Items 6. Inventory", the inventory

The balance is 2.711 billion yuan, and the amount of inventory depreciation reserve is 131 million yuan. The book value is relatively high, and the withdrawal of inventory depreciation reserve has a significant impact on the financial statements. therefore

We identify the provision for inventory decline as a key audit matter.

2. Audit response

The important audit procedures implemented for the provision for inventory decline include:

(1) Execute inventory monitoring procedures, check the quantity and status of inventory, etc.;

(2) On the basis of understanding the relevant accounting policies of Haixinnengke Company's inventory depreciation reserve, obtain the calculation form of Haixinnengke's product depreciation reserve,

The net realizable value of inventory determined by Xinnengke Company and the accrual amount of inventory impairment shall be reviewed.

4. Other information

The management of Haixinnengke is responsible for other information. The other information includes that covered in the 2022 Annual Report, but does not include the financial statements and our

Audit Report.

Our audit opinion on the financial statements does not cover the other information, nor do we express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is relevant to the financial statements or our

A material inconsistency in what was learned during the audit or an appearance of a material misstatement.

If, based on the work we have performed, we determine that there is a material misstatement of the other information, we shall report that fact. In this regard, we have nothing

Items need to be reported.

V. Responsibilities of management and those charged with governance for the financial statements

The management of Haixinnengke Company (hereinafter referred to as the management) is responsible for preparing the financial statements in accordance with the provisions of the Accounting Standards for Business Enterprises, so as to achieve fair reflection, and setting up

design, implement and maintain internal controls necessary to enable the financial statements to be free from material misstatement, whether due to fraud or error.

When preparing financial statements, the management is responsible for assessing Haixinnengke's ability to continue operating, disclosing matters related to continuing operations (if applicable), and

Use the going concern assumption unless management plans to liquidate Haixinneng, cease operations, or has no other realistic alternative.

Those charged with governance are responsible for overseeing the group's financial reporting process.

6. Responsibilities of certified public accountants for the audit of financial statements

Our objective is to obtain reasonable assurance as to whether the financial statements as a whole are free from material misstatement due to fraud or error, and to issue an audit opinion

audit report. Reasonable assurance is a high level of assurance, but it does not guarantee that an audit performed in accordance with auditing standards will always detect a material misstatement when it exists. misstatement

may have been the result of fraud or error; if it is reasonably expected that the misstatements, individually or in the aggregate, could affect the economic decisions that users of the financial statements make based on the financial statements,

The misstatement is generally considered material.

In the process of performing audit work in accordance with auditing standards, we exercise professional judgment and maintain professional skepticism. At the same time, we also perform the following tasks:

(1) Identify and assess the risks of material misstatement of the financial statements due to fraud or error, design and implement audit procedures to address these risks, and obtain

Sufficient and appropriate audit evidence serves as the basis for issuing an audit opinion. Since fraud may involve collusion, forgery, willful omissions, misrepresentation, or overriding

control, the risk of not detecting a material misstatement resulting from fraud is higher than the risk of not detecting a material misstatement resulting from error.

(2) Understand the internal controls related to the audit in order to design appropriate audit procedures, but the purpose is not to express an opinion on the effectiveness of the internal controls.

(3) Evaluate the appropriateness of the accounting policies selected by the management and the rationality of accounting estimates and related disclosures.

(4) Draw conclusions on the appropriateness of management's use of the going concern assumption. At the same time, according to the audit evidence obtained, it may lead to

A conclusion is drawn on whether there are significant uncertainties in matters or circumstances that cast significant doubt on the ability to continue as a going concern. If we conclude that a material uncertainty exists,

The auditing standards require us to draw the report users' attention to the relevant disclosures in the financial statements in the audit report;

Opinion. Our conclusions are based on the information available up to the date of the audit report. However, future events or conditions may cause Haixinneng to cease to continue as a going concern.

(5) Evaluate the overall presentation, structure and content of the financial statements, and evaluate whether the financial statements fairly reflect relevant transactions and events.

(6) Obtain sufficient and appropriate audit evidence on the financial information of entities or business activities in Haixinnengke to express opinions on the financial statements.

We communicate with those charged with governance regarding matters such as the planned scope and timing of the audit and significant audit findings, including communicating the values identified during our audit

internal control deficiencies that deserve attention.

We also provide statements to those charged with governance that we have complied with ethical requirements related to independence and communicate with those charged with

All relationships and other matters related to sex, and related precautions. (if applicable)

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. we are at

Describe these matters in the auditor's report, unless laws and regulations prohibit public disclosure of these matters, or in rare cases, if it is reasonably expected to communicate in the auditor's report

The adverse consequences of a matter outweigh the benefits in the public interest and we determine that the matter should not be communicated in the auditor's report.

Reanda Certified Public Accountants (Special General Partnership)	Chinese Certified Public Accountant (Project Partner): Liu Ge
Beijing China	Chinese Certified Public Accountant: Wang Xingjie
	April 06, 2023

2. Financial statements

The unit of the statement in the financial notes is: yuan

1. Consolidated balance sheet

Compiler: Beijing Haixin Energy Technology Co., Ltd.

December 31, 2022

unit: yuan

project	December 31, 2022	January 1, 2022
Current assets:		
Monetary Fund	485,402,466.04	526,309,228.92
Settlement Reserve Fund		
Loan out funds		
trading financial assets		
Derivative Financial Assets		
Notes Receivable	142,128,765.92	88,285,521.48
accounts receivable	1,434,317,831.52	1,248,802,595.02
Receivables Financing		
Prepaid	1,299,314,398.32	1,400,404,865.35
premiums receivable		
Reinsurance accounts receivable		
Reinsurance contract reserves receivable		
other receivables	471,532,262.45	449,534,124.09
Of which: interest receivable		
dividend receivable		

Financial assets purchased under agreements to resell		
inventory	2,580,103,484.45	1,753,072,398.20
contract assets	254,271,281.01	277,182,326.69
Assets held for sale		
Non-current assets due within one year	9,500,000.00	8,975,296.37
other current assets	49,658,406.93	113,152,183.29
Total Current Assets	6,726,228,896.64	5,865,718,539.41
Non-current assets:		
Loans and advances issued		
Debt investment		
Other debt investment		
Long-term receivables	48,029,040.75	
Long-term equity investment	1,060,808,249.03	1,533,588,980.48
Other equity instruments Investing		
in other non-current financial assets	2,581,963,967.81	2,216,479,237.49
investment property		
fixed assets	3,440,929,326.79	3,761,243,963.86
Productive biological	72,934,469.99	82,664,830.02
assets of construction in progress		
Oil and gas assets		
right-of-use asset	81,045,857.77	69,744,044.89
Intangible asset	597,801,835.54	580,267,657.78
development expenditure	182,696,116.99	194,384,328.76
Goodwill	64,656,693.34	64,656,693.34
Long-term prepaid expenses	22,508,601.43	17,618,999.83
Deferred income tax	296,563,553.25	259,388,745.46
assets Other non-current assets	99,518,665.89	121,384,028.09
Total non-current assets	8,549,456,378.58	8,901,421,510.00
total assets	15,275,685,275.22	14,767,140,049.41
Current Liabilities:		
Short-Term Borrowings	681,614,108.69	368,182,379.43
borrowing from the central bank		
Borrowing funds		
Trading financial liabilities		
Derivative financial liabilities		
Notes payable	42,227,683.41	153,720,928.72
accounts payable	1,684,701,200.21	1,656,813,985.44
Advance receipts		
contract liabilities	603,694,611.84	326,602,054.48
Financial assets sold under repurchase agreements		
Deposits and deposits		
Brokerage for buying and selling securities		

Agency underwriting securities payment		
Payable employee wages	10,498,669.58	7,998,500.99
and taxes payable	11,014,978.56	27,280,647.06
Other payables	2,202,275,827.45	1,654,775,036.34
Of which: interest payable		
Dividends		
payable Fees and commissions payable		
Reinsurance accounts payable		
Liabilities held for sale		
Non-current liabilities due within one year	1,208,716,345.45	488,400,842.22
Other current liabilities	340,501,704.72	396,288,691.11
Total current liabilities	6,785,245,129.91	5,080,063,065.79
Non-current liabilities:		
Long-term loans for insurance		
contract reserves	462,846,350.34	602,836,279.68
Bonds payable		
Of which: preferred shares		
Perpetual		
bond lease liabilities	41,049,131.57	48,169,074.21
Long-term payables	325,401,142.38	62,549,728.48
Long-term salary payable		
Estimated liability	8,394,612.80	1,908,715.24
deferred income	65,085,972.18	69,434,420.78
Deferred tax liabilities	33,353,899.33	38,002,166.44
Other non-current liabilities		
Total non-current liabilities	936,131,108.60	822,900,384.83
Total liabilities	7,721,376,238.51	5,902,963,450.62
Owner's Equity: Equity		
Other	2,349,720,302.00	2,349,720,302.00
Equity Instruments Of		307,725,300.00
which: Preferred Shares		
Perpetual		307,725,300.00
Bonds Capital	1,034,669,202.83	1,125,876,346.89
Reserve Minus:		
Treasury Shares Other	24,892,772.81	-94,336,653.09
Comprehensive	2,434,254.83	3,228,254.28
Income Special	477,568,783.10	477,568,783.10
Reserve Surplus Reserve		
General Risk	3,137,957,665.59	3,977,432,000.73
Reserve Undistributed Profit Attributable to Parent	7,027,242,981.16	8,147,214,333.91
Company Owner's Equity	527,066,055.55	716,962,264.88
Total Minority Shareholder's	7,554,309,036.71	8,864,176,598.79
Equity Owner's Equity Total Liabilities and Total Owner's Equity	15,275,685,275.22	14,767,140,049.41

Legal representative: Zhang Pengcheng Person in charge of accounting work: Sun Yanhong Person in charge of accounting agency: Li Jie

2. Parent company balance sheet

unit: yuan

project	December 31, 2022	January 1, 2022
Current Assets:		
Monetary Funds	20,793,998.26	109,628,101.37
trading financial assets		
derivative financial assets		
Notes Receivable	10,120,003.06	13,961,478.38
Accounts Receivable	640,897,320.05	692,578,325.03
Receivables Financing		
Prepayments	334,797,677.51	381,851,027.47
other receivables	3,516,232,415.19	3,104,552,153.72
Of which: interest receivable		
dividend receivable	237,013,320.31	237,013,320.31
stock	466,821,144.31	277,486,998.53
Contract		
assets Assets held for sale		
Non-current assets due within one year		
other current assets	54,451.51	54,456.09
Total Current Assets	4,989,717,009.89	4,580,112,540.59
Non-Current Assets:		
Debt investment		
Other debt investment		
Long-term receivables		
Long-term equity investment	4,387,228,184.16	4,343,934,996.59
Investment in other equity instruments		
Other non-current financial assets	1,051,416,513.89	1,046,552,191.63
Investment real		
estate fixed assets	39,007,461.87	51,842,042.46
Construction in progress		
productive biological assets		
Right to Use		
Assets of Oil and Gas Assets		
intangible assets	180,173,834.68	167,692,404.76
Development expenditure	117,714,302.77	146,197,384.06
Goodwill		
long-term deferred expenses	4,777,799.04	3,260,135.67
Deferred tax assets	195,328,564.17	161,386,745.40
Other non-current assets	1,672,755.00	91,841,955.00
Total non-current assets	5,977,319,415.58	6,012,707,855.57
Total assets	10,967,036,425.47	10,592,820,396.16
Current liabilities:		

short-term loan	250,666,666.67	
Trading financial liabilities		
Derivative financial liabilities		
Notes payable		
accounts payable	483,096,054.75	705,635,355.68
Advance receipts		
contract liabilities	30,551,429.00	1,005,617.84
Payroll payable		
Taxes payable	2,418,511.66	11,272,017.45
Other payables	2,351,720,308.61	1,529,198,257.79
Of which: interest payable		
Dividends payable		
Liabilities held for sale		
Non-current liabilities due within one year	261,403,122.52	51,790,522.59
Other current liabilities	173,902,567.92	242,271,452.75
Total current liabilities	3,553,758,661.13	2,541,173,224.10
Non-current liabilities:		
Long-term loan	382,846,350.34	462,836,279.68
payable bonds		
Of which: preferred shares		
Perpetual bonds		
Lease liability		
long-term payables		
Long-term salary payable		
Estimated liabilities		285,918.00
Deferred income		
Deferred income tax liabilities		
Other non-current liabilities		
Total non-current liabilities	382,846,350.34	463,122,197.68
Total Liabilities	3,936,605,011.47	3,004,295,421.78
Owner's Equity:		
Equity	2,349,720,302.00	2,349,720,302.00
Other Equity Instruments		307,725,300.00
Of which: Preferred		
Shares		307,725,300.00
Perpetual	1,135,251,142.33	1,160,525,842.33
Bonds Capital		
Reserve Minus: Treasury		
Stock Other		
Comprehensive	477,568,783.10	477,568,783.10
Income Special	3,067,891,186.57	3,292,984,746.95
Reserve Surplus Reserve	7,030,431,414.00	7,588,524,974.38
Undistributed Profit Total Owner's Equity Liabilities and Owner's Equity	10,967,036,425.47	10,592,820,396.16

3. Consolidated income statement

unit: yuan

project	2022	2021 year
I. Total operating income	8,648,353,147.31	5,754,901,863.00
Of which: operating income	8,648,353,147.31	5,754,901,863.00
interest income		
earned premium		
Fee and commission income		
2. Total operating cost	9,239,608,482.95	5,878,426,941.47
Of which: Operating costs	8,262,877,127.46	5,022,865,922.65
interest expense		
Handling fee and commission payment		
Surrender fee		
Net claim payout		
Net withdrawal of insurance liability contract reserves		
Policy dividend payment		
Reinsurance fee		
Taxes and surcharges	27,939,472.49	30,531,307.91
sales expense	66,487,467.38	62,167,036.22
Administrative	345,705,940.64	394,949,623.03
Expenses R&D Expenses	219,137,189.46	184,285,598.08
Financial expenses	317,461,285.52	183,627,453.58
Of which: interest expense	338,805,434.59	192,892,523.95
interest income	22,602,727.85	22,218,325.07
Plus: other income	10,261,989.41	17,580,944.38
Investment income (losses are filled with "-" List)	-112,350,582.58	25,915,058.67
Including: investment income from associates and joint ventures	-117,753,116.48	-34,222,490.92
Derecognition income of financial assets measured at amortized cost		
Exchange gains (losses are filled with "-" List)		
Net exposure hedging income (losses are listed with "-")		
Gains from changes in fair value (losses are listed with "-")		6,408,430.00
Credit impairment losses (losses are listed with "-")	-239,226,124.75	294,069,093.52
Asset impairment loss (loss is denoted by "-" fill in)	-97,344,847.40	-33,203,841.50
Gains on disposal of assets (losses are denoted by "-" fill in)	12,763,811.49	1,724,187.20
3. Operating profit (losses are filled with "-")	-1,017,151,089.47	188,968,793.80

List)		
Add: Non-operating income	1,123,469.52	5,962,310.04
Minus: Non-operating expenses	4,437,078.32	11,209,437.71
4. Total profit (total loss is listed with "-")	-1,020,464,698.27	183,721,666.13
Deduct: income tax expense	-26,384,047.59	129,210,970.42
V. Net profit (net loss is represented by "-") (1) Classified by business continuity 1. Net profit from continuing		
operations (net loss is represented by "-") 2. Net profit from discontinued	-994,080,650.68	54,510,695.71
operations (net loss is represented by "-") Fill in with "-") (2) Classification		
by ownership 1. Net profit attributable to		
shareholders of the parent company 2. Profit and loss of minority shareholders	-804,432,945.23	81,400,156.54
	-189,647,705.45	-26,889,460.83
6. Net after-tax amount of other comprehensive income	119,229,425.90	-41,463,944.82
Net after-tax amount of other comprehensive income attributable to owners of the parent	119,229,425.90	-37,659,167.83
company (1) Other comprehensive income that cannot be reclassified into		
profit or loss 1. Remeasurement of changes in defined benefit plans		
2. Other comprehensive income that cannot be transferred to profit or loss under		
the equity method 3. Fair value of other equity instrument investments change		
4. The fair value of the enterprise's own credit risk change		
5. Others (2)		
Other comprehensive income that will be reclassified into profit or loss	119,229,425.90	-37,659,167.83
1. Other comprehensive income that can be transferred to profit or loss		
under the equity method 2. Changes in the fair value of other debt investments 3. The amount of financial assets reclassified into other		
comprehensive income 4. Other debt investment credit impairment provision 5. Cash flow		
hedging reserve 6. Foreign currency financial statement	119,229,425.90	-37,659,167.83
conversion difference 7. Other net after-tax amounts of other comprehensive		-3,804,776.99
income attributable to minority shareholders 7. Total comprehensive income	-874,851,224.78	13,046,750.89
Total comprehensive income attributable to owners of the	-685,203,519.33	43,740,988.71
parent company Total comprehensive income attributable to minority shareholders	-189,647,705.45	-30,694,237.82
VIII. Earnings per share (1) Basic	-0.3424	0.0346
earnings per share (2) Diluted earnings per share	-0.3424	0.0346

In case of business merger under the same control in the current period, the net profit realized by the merged party before the merger is: 0.00 yuan, and the net profit realized by the merged party in the previous period

is: 0.00 yuan. Legal representative: Zhang Pengcheng Person in charge of accounting work: Sun Yanhong Person in charge of accounting agency: Li Jie

4. Income statement of the parent company

unit: yuan

project	2022	2021 year
I. Operating income	316,104,597.32	1,122,420,380.76
Less: operating costs	275,420,251.33	959,306,142.05
Taxes and surcharges	-1,694,669.45	8,082,618.93
sales expense	25,932,861.75	32,831,860.18
Administrative	82,729,152.82	69,643,546.19
Expenses R&D Expenses	39,943,894.84	54,503,091.26
Financial expenses	48,361,341.86	-4,155,126.66
Of which: interest expense	202,236,600.15	117,887,986.05
Interest	161,462,359.67	128,664,257.39
income plus: other income	2,360,582.54	459,092.02
Investment income (losses are filled with "-" List)	1,907,589.24	22,795,678.21
Including: investment income from associates and joint ventures	-506,812.43	-499,790.26
Gains from derecognition of financial assets measured at amortized cost (losses are listed with "-")		
Net exposure hedging income (losses are listed with "-")		
Gains from changes in fair value (losses are listed with "-")		
Credit impairment losses (losses marked with "-" fill in)	-86,278,791.74	478,965,382.76
Asset impairment losses (losses are listed with "-")		
Gains from asset disposal (losses are listed with "-")	12,625,289.58	145,665.19
2. Operating profit (losses are listed with "-")	-223,973,566.21	504,574,066.99
Add: non-operating income	420.06	1,929,930.67
Minus: non-operating expenses 3. Total profit (total loss is listed with "-")	12,411.88	9,542,389.98
	-223,985,558.03	496,961,607.68
Deduct: income tax expense	-33,933,387.56	125,180,895.53
4. Net profit (net loss is represented by "-") (1) Net profit from	-190,052,170.47	371,780,712.15
continuing operations (net loss is represented by "-") (2) Net profit from	-190,052,170.47	371,780,712.15
discontinued operations (net loss is represented by "-")) V. Net after-tax		
amount of other comprehensive income (1) Other		
comprehensive income that cannot be reclassified into profit or		
loss 1. Remeasurement of changes in defined benefit plans		

Forecast		
2. Other comprehensive income that cannot be transferred to profit or loss under the equity method 3. Fair value of other equity instrument investments change		
4. The fair value of the enterprise's own credit risk change		
5. Others (2)		
Other comprehensive income that will be reclassified into profit or loss		
1. Other comprehensive income that can be transferred to profit or loss under the equity method 2. Changes in the fair value of other debt investments 3. The amount of financial assets reclassified into other comprehensive income 4. Other debt investment credit impairment provision 5. Cash flow hedging reserve 6. Foreign currency financial statement conversion difference	-190,052,170.47	371,780,712.15
7. Others 6. Total		
comprehensive income 7. Earnings per share: (1) Basic earnings per share (2) Diluted earnings per share		

5. Consolidated cash flow statement

unit: yuan

project	2022	2021 year
1. Cash flow from operating activities:		
Net increase in cash customer deposits and interbank deposits received from sales of goods and rendering of services	6,981,602,005.63	5,587,018,040.14
Net increase in borrowings from the central bank Net increase in borrowings from other financial institutions		
Cash received from original insurance contract premiums		
Net cash received from reinsurance business		
Net increase in policyholder deposits and investment funds Net increase in cash borrowing from interest, handling fees and commissions Net increase in repurchase business funds Net cash received from agency trading of securities		
Refunds of taxes and fees	69,926,317.54	85,194,019.45
received Other cash related to operating activities Received	108,135,320.52	140,162,845.07
Subtotal of cash inflows from operating activities	7,159,663,643.69	5,812,374,904.66
Cash paid for goods purchased and services received	6,892,300,164.16	3,881,563,929.31
Net increase in loans and advances to customers		
Net increase in deposits with the central bank and interbank deposits		
Cash payment of original insurance contract claims and net increase in borrowed funds		
Cash payment of interest, handling fees and commissions Cash payment of policy dividends Cash payment to employees and various taxes and fees paid in cash for employees	408,706,376.52	545,864,236.79
	167,464,513.80	120,902,914.41

Payment of other cash related to operating activities	201,783,072.38	239,740,874.01
Subtotal of cash outflow from operating activities	7,670,254,126.86	4,788,071,954.52
activities Net cash flow from operating activities 2.	-510,590,483.17	1,024,302,950.14
Cash flow from investing activities: Cash received from		
recovery of investment to obtain	8,465,677.74	8,559,573.26
investment income Cash received from		117,474,685.80
disposal of fixed assets and intangible assets Net cash received from disposal of subsidiaries	273,000.00	274,835.00
and other business units Net cash received from disposal of subsidiaries and		551,162,910.75
other business units Other cash related to investing	90,000,000.00	2,986,643.19
activities Cash inflow from investing	98,738,677.74	680,458,648.00
activities Subtotal Purchase and construction of fixed assets, intangible assets and other long-term assets	203,076,495.21	190,613,702.74
Net increase in cash pledged		
loans paid in cash paid for		
long-term assets Net cash paid		
for acquisitions of subsidiaries and other business units	10,000,000.00	
Net cash paid		
for other investing activities Cash outflows from		1,402,360,125.43
investing activities Subtotal Net cash	213,076,495.21	1,592,973,828.17
flows generated from investing activities III. Cash	-114,337,817.47	-912,515,180.17
flow from financing activities: Cash received from		
absorbing investment Among them:		26,449,670.80
cash received by subsidiaries from absorbing investment from minority		26,449,670.80
shareholders Obtained cash	679,000,000.00	267,600,000.00
received from loans Cash received from other cash	3,712,932,956.19	3,113,489,880.06
related to financing activities Subtotal	4,391,932,956.19	3,407,539,550.86
of cash inflows from financing activities Repayment of debts cash	812,026,253.30	1,774,533,300.00
Cash paid for distribution of dividends, profits or	196,195,578.31	235,395,104.29
interest payment Including: Dividends paid by subsidiaries		124,676,510.27
to minority shareholders, profit payments	2,665,306,953.68	2,834,677,113.79
Other cash related to financing	3,673,528,785.29	4,844,605,518.08
activities Cash outflow from financing	718,404,170.90	-1,437,065,967.22
activities Subtotal Net cash flow from financing	3,834,271.43	-10,071,135.17
activities and cash equivalents V. Net increase in cash and cash equivalents	97,310,141.69	-1,335,349,332.42
Add: Opening balance of cash and cash equivalents	346,680,504.74	1,682,029,837.16
6. Balance of cash and cash equivalents at the end of the period	443,990,646.43	346,680,504.74

6. Cash flow statement of the parent company

unit: yuan

project	2022	2021 year
1. Cash flow from operating activities:		
Cash received from sales of goods and rendering of labor	250,493,804.96	1,387,093,561.69
services Receipt of taxes and fees returned	89,288,245.75	6,437,863.95
Other cash related to operating	339,782,050.71	1,393,531,425.64
activities Cash inflows from operating	497,822,991.68	556,865,559.06
activities Tax payments and other cash related	63,781,272.40	60,827,777.27
to operating activities	61,805,673.08	1,481,854.30
	120,578,157.89	182,552,791.98

Subtotal of cash outflow from	743,988,095.05	801,727,982.61
operating activities Net cash flow from operating	-404,206,044.34	591,803,443.03
activities 2. Cash flow from investing activities:		
Cash received from recovering	8,465,677.74	693,762,173.26
investment to obtain investment income		9,200,000.00
Cash received from disposal of fixed assets, intangible assets and other long-term assets	110,000.00	248,000.00
Net cash recovered Net cash received from disposal of subsidiaries		
and other business units Other cash received	2,397,960,920.74	479,364,626.59
related to investing activities Cash	2,406,536,598.48	1,182,574,799.85
inflow from investing activities Subtotal Cash paid for purchase and construction	4,436,087.77	50,130,352.73
of fixed assets, intangible	53,800,000.00	
assets and other long-term assets Net cash paid by other operating		
units and other cash payments related to investment	2,312,397,177.51	1,494,592,466.94
activities Cash outflow from	2,370,633,265.28	1,544,722,819.67
investment activities Subtotal Net cash flow	35,903,333.20	-362,148,019.82
from investment activities 3. Cash flow from		
financing activities: Cash		
received from absorbing	250,000,000.00	
investment Obtained from borrowings received	4,054,706,226.00	2,967,173,956.72
Cash received from other financing	4,304,706,226.00	2,967,173,956.72
activities Cash inflows from	384,426,253.30	350,000,000.00
financing activities Subtotal Debt repayment Cash	141,023,410.01	56,665,405.01
distributions paid Dividends, profits or interest payments	3,420,836,631.75	2,799,596,200.57
Cash payments Other cash related	3,946,286,295.06	3,206,261,605.58
to financing activities Cash outflows from	358,419,930.94	-239,087,648.86
financing activities Subtotal Income from financing	-1,253.00	
activities Net cash flow 4. Impact of exchange rate changes on cash and cash equivalents 5. Net increase (decrease) in cash and cash equivalents	9,984,633.20	-9,432,225.65
Add: Opening balance of cash and cash equivalents	11,615,770.87	21,047,996.52
6. Balance of cash and cash equivalents at the end of the period	1,731,737.67	11,615,770.87

7. Consolidated statement of changes in owner's equity

Current Amount

unit: yuan

project	2022														
	Equity attributable to equity holders													minority interests	Total owner's equity
	share capital	Other Equity Instruments			capital reserve	Less: treasury stock	Other comprehensive income	Special reserves	Surplus reserve	general risk preparation	undistributed profit	other subtotal			
		preferred stock	Perpetual bonds	other											
one, Last year's balance	2,349,030.200		307,725,300.00		1,125,634.689		94,336.653.09	3,228.254.28	477,568.783.10		3,977.432.000.73		8,147.214.333.91	716,962.264.88	8,864,176.598.79
Add: accounting policy															

policy change															
Early error correction	forward														
Under the same control	same														
Business merger															
other	That														
two, Opening balance of the year	2,34 9,72 0,30 2.00		307, 725, 300. 00		1,12 5,87 6,34 6.89		94,3 36,6 53.09	3,22 8,25 4.28	477, 568, 783. 10		3,97 7,43 2,00 0.73		8,14 7,21 4,33 3.91	716, 962, 264. 88	8,86 4,17 6,59 8.79
3. The amount of increase or decrease in the current period (minus Fill in less with "+") List)			307, 725, 300. 00		91,2 07,1 44.06		119, 229, 425. 90	793, 999. 45			839, 474, 335. 14		1,11 9,97 1,35 2.75	189, 896, 209. 33	1,30 9,86 7,56 2.08
(1) Comprehensive income total benefit							119, 229, 425. 90				804, 432, 945. 23		685, 203, 519. 33	189, 647, 705. 45	874, 851, 224. 78
(2) Owner input and deduction less capital			307, 725, 300. 00		91,2 07,1 44.06								398, 932, 444. 06		398, 932, 444. 06
1 , invested by the owner															
common stock 2. Other equity instrument holders invested capital			307, 725, 300. 00		25,2 74,7 00.00								333, 000, 000. 00		333, 000, 000. 00

Book 3. Share															
payment included in owner's equity															
Amount 4. other					65,9 32,4 44.06							65,9 32,4 44.06		65,9 32,4 44.06	
(3) Profit											35,0 41,3 89.91		35,0 41,3 89.91		35,0 41,3 89.91
profit distribution															
1 , withdrawal of surplus															
Reserve 2. extract general risk															
prepare 3. to the owner (or shares East) distribution of											35,0 41,3 89.91		35,0 41,3 89.91		35,0 41,3 89.91
4 , other															
(4) Inside owner's equity															
carry forward 1. capital reserve (or share															
capital) 2. Surplus reserve															

Capitalization (or share capital)															
3. Surplus reserves make up losses															
4y Changes in defined benefit plans carried forward to retained earnings															
5y Other comprehensive income carried forward to retained earnings															
6y other															
(5) Special reserve							793,999.45					793,999.45	248,503.88	1,042,503.33	
1y Withdrawal in this period							20,336,276.10					20,336,276.10	7,598,178.21	27,934,454.31	
2y Use this issue							21,130,275.55					21,130,275.55	7,846,682.09	28,976,957.64	
(6) Others															
4. The ending balance of the current period and the	2,349,720,302.00				1,034,669,202.83		24,892,772.81	2,434,254.83	477,568,783.10		3,137,957,665.59		7,027,242,981.16	527,066,055.55	7,554,309,903.67

amount of the previous period

unit: yuan

project	2021 year												
	Equity attributable to equity holders											minority interests	owner's equity
	share capital	Other equity instruments Capital		reserve priority	Less: Inventory	other comprehensive	Special reserves	Surplus reserve	general risk	undistributed interest	other subtotal		
		perpetual	Others										

		Stocks and bonds			share income			ready to run						count	
one,	2,34		307,		1,12		56,6	2,97	440,		3,95		8,12	1,64	9,77
Last	9,72		725,		4,20		77,4	5,22	390,		7,34		5,67	7,75	3,43
year's	0,30		300.		2,99			2,08	711.		2,31		9,36	9,12	8,48
balance	2.00		00		7.20		85.26		88		3.85		1.75	1.19	2.94
Accounting policy											822,398.44		822,398.44	1,272,350.51	2,094,748.95
Early error correction	forward														
Under the same control	same														
Business merger															
other	That														
two,	2,34		307,		1,12		56,6	2,97	440,		3,95		8,12	1,64	9,77
Opening	9,72		725,		4,20		77,4	5,22	390,		6,51		4,85	6,48	1,34
balance	0,30		300.		2,99			2,08	711.		9,91		6,96	6,77	3,73
of the year	2.00		00		7.20		85.26		88		5.41		3.31	0.68	3.99
3. The amount of increase or decrease in the current period (minus)					1,673,349.69		37,659,167.83	253,032.20	37,178,071.22		20,912,085.32		22,357,370.60	929,524,505.80	907,167,135.20
Fill in less with "+" List)															
(1)							37,659,167.83				81,400,156.54		43,740,988.71	30,694,237.82	13,046,750.89
Comprehensive income															
total benefit															
(2)					1,673,349.69								1,673,349.69	708,299,707.88	706,626,358.19
Owner input and deduction															
less capital															
1 ,					1,673,349.69								1,673,349.69	509,018,102.53	510,691,452.22
invested by the owner															

common stock 2. Other equity instrument holders															
Invest in capital 3. The amount of share payment included in owner's equity														43,508,386.39	43,508,386.39
4 other														1,260,826,196.80	1,260,826,196.80
(3) Profit profit distribution									37,178,071.22		60,488,071.22		23,310,000.00	190,336,853.31	213,646,853.31
1 Withdrawal of surplus reserve									37,178,071.22		37,178,071.22				
2 extract general risk															
prepare 3. to the owner (or shares East) distribution of											23,310,000.00		23,310,000.00	190,336,853.31	213,646,853.31
4 other															
(4) Inside owner's equity															
carry forward 1.															

capital reserve															
(or share															
capital) 2. Turn surplus reserve into capital															
(or share															
capital) 3. Surplus reserve make up															
Loss 4. Changes in defined benefit plans carried forward															
Saving income5. Other															
comprehensive income carried forward and retained															
income6. other															
(5) Professional item reserve							253, 032. 20					253, 032. 20	193, 706. 79	59,3 25.41	
1 , Withdrawal in this period							8,84 8,86 6.20					8,84 8,86 6.20	4,16 3,04 9.03	13,0 11,9 15.23	
2 , Use this issue							8,59 5,83 4.00					8,59 5,83 4.00	4,35 6,75 5.82	12,9 52,5 89.82	
(six other															
4. This issue	2,34 9,72		307, 725,		1,12 5,87		94,3	3,22 8,25	477, 568,		3,97 7,43		8,14 7,21	716, 962,	8,86 4,17

Ending balance	0,30 2.00		300. 00		6,34 6.89		36,6 53.0 9	4.28 783.		10		2,00 0.73		4,33 3.91	264. 88	6,59 8.79
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8. Statement of changes in owner's equity of the parent company

Current Amount

unit: yuan

project	2022											
	share capital	Other Equity Instruments			capital reserve	Less: treasury stock	Other comprehensive income	Special reserves	Surplus reserve	undistributed profit	other	Total owner's equity
		preferred stock	Perpetual bonds	other								
one, Last year's balance	2,349,720,302.00		307,725,300.00		1,160,525,842.33				477,568,783.10	3,292,984,746.95		7,588,524,974.38
Add: Changes in accounting policies												
Early error correction	forward											
other	That											
2. Balance at the beginning of the year	2,349,720,302.00		307,725,300.00		1,160,525,842.33				477,568,783.10	3,292,984,746.95		7,588,524,974.38
3. The amount of increase or decrease in the current period (decrease by "y" * fill in the column)			307,725,300.00		25,274,700.00					225,093,560.38		558,093,560.38
(1) Total comprehensive income										190,052,170.47		190,052,170.47
(2) Owner input and deduction			307,725,300.00		25,274,700.00							333,000,000.00

Less capital 1. Place												
Owner-												
invested												
Shares 2. That												
Other												
equity			307,7		25,27							333,0
			25,30		4,700							00,00
			0.00		.00							0.00
instrument holders invest capital												
3. Share												
payment included in owner's equity												
4. That												
he												
(3)												
Profit									35,04			35,04
									1,389			1,389
profit distribution									.91			.91
1.												
Withdraw profit												
Surplus reserve 2. right												
owner												
(or share												
East)									35,04			35,04
									1,389			1,389
distribution of									.91			.91
3. other												
(4)												
Inside												
owner's equity												
carry forward 1. capital												
Transfer of the												
public reserve												
capital increase												
(or												

share capital)												
2. Turn surplus reserve into capital (or share capital)												
3. Surplus reserves make up losses												
4. Changes in defined benefit plans carried forward to retained earnings												
5. Other comprehensive income carried forward to retained earnings												
6. other												
(5) Special reserve												
1. Withdrawal in this period												
2. Use this issue												
(6) Others												
4. The balance at the end of the period	2,349 720, 302.0 0				1,135 251, 142.3 3				477,5 68,78 3.10	3,067 891, 186.5 7		7,030 431, 414.0 0

Previous amount

unit: yuan

project	2021 year
---------	-----------

	share capital	Other Equity Instruments			capital reserve	Less: treasury stock	Other comprehensive income	Special reserves	Surplus reserve	undistributed profit	other	Total owner's equity
		preferred stock	Perpetual bonds	other								
One, Last year's balance	2,349,720,302.00		307,725,300.00		1,160,525,842.33				440,390,711.88	2,981,692,106.02		7,240,054,262.23
Add: Changes in accounting policies												
Early error correction	forward											
other	That											
two, Opening balance of the year	2,349,720,302.00		307,725,300.00		1,160,525,842.33				440,390,711.88	2,981,692,106.02		7,240,054,262.23
3. The amount of increase or decrease in the current period (decrease by "y" * fill in the column)									37,178,071.22	311,292,640.93		348,470,712.15
(1) Total comprehensive income										371,780,712.15		371,780,712.15
(2) Owner input and reduction of capital												
1. Common stock												
contributed by the owner 2. Other equity workers												

holder input												
Capital 3. share												
Payment included in owner's equity												
4. That he												
(3) Profit									37,17 8,071 .22	60,48 8,071 .2 2		23,31 0,000 .00
profit distribution												
1. Withdraw profit									37,17 8,071 .22	37,17 8,071 .22		
surplus reserve												
2. right owner (or share East)										23,31 0,000 .00		23,31 0,000 .00
distribution of												
3. other												
(4) Inside owner's equity												
carry forward 1. capital Transfer of the public reserve Capital increase (or												
share capital) 2. surplus surplus reserve Capital increase (or share Book)												

3. Surplus reserves make up losses												
4. Changes in defined benefit plans carried forward to retained earnings												
5. Other comprehensive income carried forward to retained earnings												
6. other												
(5) Special reserve												
1. Withdrawal in this period												
2. Use this issue												
(6) Others												
4. The balance at the end of the period	2,349,720,302.00		307,725,300.00		1,160,525,842.33				477,568,783.10	3,292,984,746.95		7,588,524,974.38

3. Basic information of the company

Beijing Haixin Energy Technology Co., Ltd. (formerly known as Beijing Sanju Environmental Protection New Materials Co., Ltd., hereinafter referred to as "the company" or "the company")

Formerly known as Beijing Sanju Chemical Technology Co., Ltd., it was jointly funded and established by natural persons Lin Ke, Zhang Jie and Li Dong. It was established on June 3, 1997 with a registered capital of 100,000 yuan.

After several capital increases and equity transfers, the company's registered capital was changed to 51 million yuan in 2007. After the increase of the registered capital, the capital contributions and proportions of legal person shareholders and natural person shareholders are as follows: 2 legal person shareholders, contributing RMB 28,613,300, accounting for 56.11% of the registered capital; 18 natural person shareholders, contributing capital 22.3867 million yuan, accounting for 43.89% of the registered capital. According to the resolution of the fifth session of the second shareholders' meeting on October 29, 2007 and the revised articles of association, The company as a whole was changed to Beijing Sanju Environmental Protection New Materials Co., Ltd. Registered with the Beijing Municipal Bureau of Industry and Commerce on November 26, 2007, with a unified social credit code 91110000633025574Yy

After the capital increase in 2008 and the equity transfer in 2009, the registered capital of the company is 72.27 million yuan, including: Beijing Haidian Science and Technology Development Co., Ltd., Beijing Zhongheng

Tianda Technology Development Co., Ltd. legal person shareholders hold 34.8633 million shares, accounting for 48.25% of the registered capital; natural person shareholders hold 37.4067 million shares, accounting for

The ratio of registered capital is 51.75%.

The China Securities Regulatory Commission's "Reply on Approving Beijing Sanju Environmental Protection New Materials Co., Ltd.'s Initial Issuance of Stocks and Listing on the Growth Enterprise Market"

(Zheng Jian Ke Ke [2010] No. 400), the company was listed on the GEM of the Shenzhen Stock Exchange on April 27, 2010, and the company publicly issued 25,000,000.00 RMB ordinary shares (with a par value of 1 yuan per share). Tianjian

Zhengxin Certified Public Accountants Co., Ltd. made its first public announcement to the company on April 19, 2010.

The availability of funds for the issuance of shares has been verified, and Tianjianzhengxinyan (2010) Zongzi No. 010014 "Capital Verification Report" has been issued. The registered capital of the company was changed to

97.27 million yuan.

According to the resolution of the 2010 Annual General Meeting of Shareholders and the provisions of the revised Articles of Association, the company transferred 10 shares to all shareholders for every 10 shares from the capital reserve, and the total share capital was

97.27 million shares increased to 194.54 million shares. After the verification of the Tianjian Zhengxin Yan (2011) Zongzi No. 010017 Capital Verification Report issued by Tianjian Zhengxin Certified Public Accountants Co., Ltd. on May 13, 2011,

the company's registered capital was changed to 194.54 million Yuan.

According to the resolution of the 2011 Annual General Meeting of Shareholders and the revised Articles of Association, the company transferred 10 shares to all shareholders for every 10 shares from the capital reserve, and the total share capital was

194.54 million shares increased to 389.08 million shares, according to the (2012) Zhonglei (Inspection A) issued by Zhonglei Certified Public Accountants Co., Ltd. on April 28, 2012

Zi No. 0010 capital verification report verification, the company's registered capital changed to 389.08 million yuan.

According to the resolution of the 2012 annual general meeting of shareholders and the revised articles of association, the company transferred 3 shares to all shareholders for every 10 shares from the capital reserve, and the total

share capital increased from 389.08 million shares to 505.804 million shares. Reanda's word verification issued on May 15, 2013 [2013]

The capital verification report No. 1012 was verified, and the registered capital of the company was changed to RMB 505,804,000.

According to the resolution of the company's 1st extraordinary shareholders' meeting in 2014 and approved by the China Securities Regulatory Commission, the company issued a non-public offering to 5 specific investors

There are 3,033,978 RMB ordinary shares at an issue price of RMB 16.48 per share. This change in paid-in capital (share capital) has been approved by Reanda Certified Public Accountants (special

general partnership) and issued Reanda Yanzi [2014] No. 1048 capital verification report, and the registered capital was changed to RMB 508,837,978.00.

According to the resolution of the 2014 Annual General Meeting of Shareholders held on April 10, 2015 and the revised Articles of Association, the company issued 3 additional shares for every 10 shares, at the rate of

152,651,393 shares were transferred from the capital reserve to all shareholders, with a par value of 1 yuan per share. The benchmark date for transfer to increase is April 30, 2015, and the registered capital after the change is Renminbi

RMB 661,489,371.00. This change of paid-in capital (share capital) has been verified by Reanda Certified Public Accountants (Special General Partnership) and issued by Reanda Certified Public Accountants

[2015] No. 1053 Capital Verification Report, the registered capital was changed to RMB 661,489,371.00.

According to the resolution of the seventh meeting of the third session of the board of directors and the third extraordinary general meeting of shareholders in 2014, and the "Reply on Approving the Non-public Issuance of Stocks of

Beijing Sanju Environmental Protection New Materials Co., Ltd." (approved by the China Securities Regulatory Commission) [2015] No. 1656), agreeing to the company's non-public development

No more than 116,734,079 RMB ordinary shares (with a face value of RMB 1 per share), the registered capital after modification is RMB 778,223,450.00, and the paid-in capital

(Share capital) is RMB 778,223,450.00.

The pricing benchmark date for this non-public offering of shares is the announcement date of the resolutions of the seventh meeting of the third board of directors of the company, that is, December 1, 2014.

The issue price of the listed shares shall not be lower than 90% of the average price of the company's shares in the 20 trading days prior to the pricing base date. As the company has completed the 2014 annual profit distribution plan on April 30,

2015, the "About the Company's Adjustment of Non-public Issuance of

Proposal on Issue Price and Quantity of Issued Stocks", agreeing that the issue price of this non-public offering of stocks is 17.13 yuan per share. This paid-in capital (share capital) change has been

Reanda Certified Public Accountants (Special General Partnership) verified and issued Reanda Yanzi [2015] No. 2056 capital verification report, and the registered capital was changed to RMB

778,223,450.00 yuan.

According to the "Proposal on Beijing Sanju Environmental Protection New Materials Co., Ltd. Restricted Stock Incentive Plan (Draft) and Its Summary" reviewed and approved by the company's fifth extraordinary shareholders' meeting

in 2015, and the company's plan on granting restricted stock to incentive objects Announcement of shares and provisions of the amended articles of association, the company in 2016

On January 14, 2019, 18.47 million restricted stock shares were granted to 190 restricted stock incentive objects, including Liu Lei and Lin Ke, at a price of 17.37 yuan/

The source of the stock is the company's A-share ordinary shares issued by the company to the incentive objects. The company increased its share capital by RMB 18,470,000.00, and the changed share capital is

RMB 796,693,450.00. This change of paid-in capital has been verified by Reanda Certified Public Accountants (Special General Partnership) and issued by Reanda Certified Public Accountants [2016]

Capital Verification Report No. 2025.

According to the company's 2016 first interim shareholder meeting resolution held on May 13, 2016 and the revised articles of association, the company applied to increase the registered capital

RMB 389,111,693.00, converted from capital reserves to share capital, the benchmark date for conversion is May 13, 2016, and the registered capital after change is RMB

1,185,805,143.00 yuan, and the share capital is 1,185,805,143.00 yuan. This change of paid-in capital has been verified by Zhongzhun Certified Public Accountants (Special General Partnership)

And issued Zhong Zhun Yan Zi [2016] No. 1097 Capital Verification Report.

On May 16, 2016, the 26th meeting of the third board of directors and the 17th meeting of the third board of supervisors of the company reviewed and approved the "About the

The Proposal on the First Grant of Exercising Rights in the First Exercise Period under the Stock Option Incentive Plan and the Proposal on the First Grant of Exercising Rights in the First Exercise Period under the Stock Option Incentive Plan

Case", the company's board of directors believes that the exercise conditions of the first exercise period of the first stock option incentive plan have been met, and agrees that the first grant of the incentive plan is in line with this exercise

The total number of 9,790,749 stock options exercised by the 49 incentive objects in the company's first exercise period is 9,790,749, and they choose the independent exercise mode. First exercise

The number is 9,790,749.00 shares, and the share capital is increased by 9,790,749.00 yuan. After the exercise, the share capital is changed to 1,195,595,892.00 yuan. The paid-in capital change business experience

Reanda Certified Public Accountants (Special General Partnership) verified and issued Reanda Yanzi [2017] No. 2064 Capital Verification Report.

On March 15, 2017, the resolution of the company's 2016 annual general meeting of shareholders and the revised articles of association stipulated that the company increased its registered capital in RMB

597,797,946.00 yuan, the capital reserve was converted into share capital, the base date of conversion was April 28, 2017, and the registered capital after the change was RMB

1,793,393,838.00 yuan, and the share capital is 1,793,393,838.00 yuan. This change of paid-in capital has been verified by Reanda Certified Public Accountants (Special General Partnership)

and issued Reanda Yanzi [2017] No. 2065 Capital Verification Report.

On February 22, 2017, the 34th meeting of the third session of the board of directors and the 20th meeting of the third session of the board of supervisors agreed that 49 employees who had been granted stock options

The number of exercisable stock options for incentive objects in the second exercise period is 9,790,750, and they choose the way of independent exercise, and the third session on April 25, 2017

The 38th meeting of the board of directors and the 23rd meeting of the third board of supervisors reviewed and approved the "About Adjusting the Company's Stock Option and Restricted Stock Incentive Plan"

Proposal on the number of rights and interests and exercise/repurchase price", the number of stock options was adjusted to 14,686,125, and the exercise price was adjusted to 5.791 yuan per share. Company applications increase

The registered capital is RMB 14,686,125.00, and the newly increased registered capital is RMB 1,808,079,963.00. This change in paid-in capital has been verified by Reanda Certified Public Accountants (Special General Partnership) and

issued a capital verification report No. 2075 by Reanda Yanzi [2017].

According to the resolution of the 2017 Annual General Meeting of Shareholders held on May 15, 2018 and the revised articles of association, the company applied to increase the registered capital of RMB

542,423,988.00 yuan, the capital reserve was converted into share capital, the base date of conversion was July 24, 2018, and the registered capital after the change was RMB

2,350,503,951.00 yuan, and the share capital is 2,350,503,951.00 yuan. This change of paid-in capital has been verified by Reanda Certified Public Accountants (Special General Partnership)

and issued Reanda Yanzi [2018] No. Beijing A2028 Capital Verification Report for verification.

According to the restricted stock repurchase agreement between the company and shareholder Wang Qingming, the resolution of the second extraordinary general meeting of shareholders in 2018 and the revised articles of association, shareholder Wang Qingming

Capital reduction of 783,649.00 yuan. The company returned Wang Qingming RMB 4,690,139.27 in currency at RMB 5.985 per share, and at the same time reduced the share capital

RMB 783,649.00, capital reserve RMB 3,906,490.27. After the change, the company's share capital is RMB 2,349,720,302.00. The above capital reduction

This item has been verified by Reanda Certified Public Accountants (Special General Partnership) Reanda Yanzi [2019] Jing A2014 Capital Verification Report.

On July 15, 2022, the company's full name was changed from "Beijing Sanju Environmental Protection New Materials Co., Ltd." to "Beijing Haixin Energy Technology Co., Ltd.

manage".

As of December 31, 2022, the total share capital of the company is 2,349,720,302.00 shares, and the registered capital is RMB 2,349,720,302.00.

Company registered address: Floor 9, Daxing Jiye Building, Building 1, No. 33, Renda North Road, Haidian District, Beijing;

Legal representative: Zhang Pengcheng;

The parent company of the company is Beijing Haixinzhi Low Carbon Technology Development Co.,

Ltd. This financial statement has been approved by the board of directors of the company on April 6, 2023.

In 2022, the company has 23 second-tier subsidiaries included in the scope of consolidation (another 16 third-tier companies, and one company above third-tier).

For details, please refer to Note 9 "Equities in Other Entities". The number of subsidiaries within the scope of consolidation of the company this year increased by 1 compared with the previous year.

surrounding changes".

4. Basis for the preparation of financial statements

1. Compilation basis

The company's financial statements are based on the assumption of going concern, based on the actual transactions and events, in accordance with the "Accounting Standards for Business Enterprises-Basic Standards" issued by

the Ministry of Finance (issued by the Ministry of Finance Order No. 33 and revised by the Ministry of Finance Order No. 76) , 42 specific accounting standards promulgated and revised on and after February 15, 2006

Rules, Guidelines for the Application of Accounting Standards for Business Enterprises, Interpretation of Accounting Standards for Business Enterprises and other relevant regulations (hereinafter collectively referred to as "Accounting Standards for Business Enterprises"), and China Securities Regulatory Commission

Compiled the disclosure regulations of the Committee's "Information Disclosure and Reporting Rules for Companies Offering Securities to the Public No. 15 - General Provisions on Financial Reports" (revised in 2014).

According to the relevant provisions of the Accounting Standards for Business Enterprises, the Company's accounting is based on the accrual basis. Except for certain financial instruments, the financial statements are based on historical

This is the basis of measurement. If assets are impaired, corresponding impairment reserves shall be withdrawn in accordance with relevant regulations.

2. Continued operation

After assessing the sustainable operation ability, the management of the company believes that there will be no major doubts about the sustainable operation ability in the next 12 months. The company's financial report

The table is based on the going concern assumption.

V. Significant accounting policies and accounting estimates

Tips for specific accounting policies and accounting estimates:

The following important accounting policies and accounting estimates of the Company are formulated in accordance with the Accounting Standards for Business Enterprises. Businesses not mentioned are implemented in accordance with the relevant accounting policies in the Accounting Standards for Business Enterprises.

1. Statement of Compliance with Accounting Standards for Business Enterprises

The financial statements prepared by the company comply with the requirements of the Accounting Standards for Business Enterprises, and truly and completely reflect the company's financial status and status on December 31, 2022

2022 operating results and cash flow and other relevant information. In addition, the Company's financial statements comply in all material respects with the China Securities Regulatory Commission

The 2014 revision of the "Compilation Rules for Information Disclosure by Companies Offering Securities to the Public No. 15 - General Provisions on Financial Reporting" on the disclosure of financial statements and their notes

Require.

2. Accounting period

The company's accounting period is divided into annual and interim. Mid-terms include semi-annual, quarterly and monthly. Annual, semi-annual, quarterly, monthly start and end dates according to the Gregorian calendar

Sure. The company's fiscal year is from January 1 to December 31 each year.

3. Business cycle

The company takes 12 months as a business cycle, and uses it as the standard for dividing the liquidity of assets and liabilities.

4. Bookkeeping standard currency

Renminbi is the currency in the main economic environment in which the Company and its domestic subsidiaries operate, and the Company and its domestic subsidiaries use Renminbi as the functional currency for bookkeeping. Book

The currency used by the company when preparing the financial statements is RMB.

5. Accounting treatment methods for business combinations under the same control and not under the same control

(1) Business combination under the same control

Enterprises participating in the merger are subject to the ultimate control of the same party or the same parties before and after the merger, and the control is not temporary, which is a business combination under the same control.

For a business combination under the same control, if the merging party pays cash, transfers non-cash assets or assumes debts as the consideration for the combination, it shall, on the date of combination, follow the

The share of the book value of the merged party's owner's equity in the final controlling party's consolidated financial statements is taken as the initial investment cost of the long-term equity investment. The merged party is in the

If the book value of net assets on the date of merger is negative, the cost of long-term equity investment shall be determined as zero, and shall be registered in the reference book at the same time. If the merged party is merged to

If it is controlled by the ultimate controlling party through a business combination not under the same control, the initial investment cost of the long-term equity investment of the merging party shall also include the relevant goodwill amount. For the

difference between the initial investment cost of long-term equity investment and the cash paid, the non-cash assets transferred and the book value of the debts assumed, the capital shall be adjusted.

If the capital reserve is insufficient to offset, the retained earnings shall be adjusted. If the merging party issues equity securities as the consideration for the merger, it shall, on the merger date, follow the

The share of the book value of the owner's equity in the consolidated financial statements of the ultimate controlling party is taken as the initial investment cost of the long-term equity investment. According to the par value of the issued shares

The difference between the initial investment cost of the long-term equity investment and the total face value of the issued shares shall be adjusted to the capital reserve; if the capital reserve is insufficient to offset

Yes, adjust retained earnings.

The company, as the merging party, incurred various direct related expenses for the business combination, including audit fees, evaluation fees, legal service fees, etc.

Included in the current profit and loss when it occurs. The transaction costs directly related to the issuance of equity instruments as the consideration for the merger shall be offset against the capital reserve (share premium), and if the capital reserve (share premium)

is insufficient to offset, the surplus reserve and undistributed profits shall be offset sequentially. Transaction expenses directly related to the issuance of debt instruments as the consideration for the merger, calculated as

The initially recognized amount of debt instruments.

The merger of enterprises under the same control is realized step by step through multiple transactions, and if it belongs to a package deal, the merging party shall treat each transaction as a transaction to obtain control.

Ease of accounting. If it does not belong to the "package deal", on the merger date, according to the net assets of the merged party after the merger, the final controlling party's consolidated financial statements

The share of the book value in the financial statements determines the initial investment cost of the long-term equity investment. The initial investment cost and the long-term equity investment account before the merger

The difference between the face value and the sum of the book value of the newly paid consideration for the further acquisition of shares on the date of merger, adjust the capital reserve (share capital premium), and write off the capital reserve if it is insufficient

Yes, offset retained earnings. Equity investment held before the merger date, other comprehensive income recognized due to the adoption of equity method accounting or financial instrument recognition and measurement standards

Accounting treatment will not be carried out temporarily until the investment is disposed of on the same basis as the invested entity's direct disposal of related assets or liabilities for accounting treatment;

Other changes in owner's equity other than net profit and loss, other comprehensive income and profit distribution in the net assets of the investee recognized by the equity method are not included for the time being.

Accounting treatment is carried out until the investment is transferred to the current profit and loss when the investment is disposed of.

In the consolidated financial statements, the long-term equity investment held by the merging party prior to the merger is ultimately in the same party as the merging party and the merged party on the date of acquisition.

Relevant gains and losses, other comprehensive income and other changes in owner's equity that have been recognized between the date of control, whichever is later and the date of merger, shall be offset against the beginning of the comparative reporting period.

Retained earnings or current profit and loss.

(2) Business combination not under the same control

If the parties participating in the merger are not ultimately controlled by the same party or the same parties before and after the merger, it is a business combination not under the same control.

For a business combination realized by an exchange transaction, the combination cost is the assets paid, incurred or assumed by the company to obtain the control over the purchased party on the date of purchase.

liabilities and the fair value of equity securities issued.

For the business combination realized step by step through multiple exchange transactions, separate financial statements and consolidated financial statements are distinguished for relevant accounting treatment: in the individual financial statements

Among them, the sum of the book value of the equity investment in the acquiree held before the purchase date and the new investment cost on the purchase date shall be taken as the initial investment cost of the investment;

In the consolidated financial statements, the equity of the acquiree held before the purchase date shall be remeasured according to the fair value of the equity on the purchase date, and the difference between the fair value and its book value shall be included in the

current investment income; If the equity of the acquired party involves other comprehensive income under the equity method, instead of

Relevant other comprehensive income, etc. shall be transferred to the current income on the date of purchase. Intermediary fees such as auditing, legal services, evaluation and consulting incurred by the purchaser for business mergers

and other related management expenses shall be included in the current profit and loss when incurred. Transaction costs of equity instruments or debt instruments issued by the purchaser as consideration for the merger,

It should be included in the initial recognition amount of equity instruments or debt instruments.

In a business combination not under the same control, the difference between the cost of the business combination and the share of the fair value of the identifiable net assets of the acquiree obtained in the merger shall be recognized as goodwill; The

difference in the fair value share of net assets shall be handled in accordance with the following provisions:

The fair value of various identifiable assets, liabilities and contingent liabilities of the acquired party and the measurement of the combination cost shall be reviewed; after the review, the combination cost is still less than the contract

If the fair value share of the acquired party's identifiable net assets obtained in the merger, the difference shall be included in the current profit and loss.

6. Preparation method of consolidated financial statements

(1) Principles for determining the scope of consolidated financial statements

The scope of consolidation of consolidated financial statements is determined on the basis of control. Control means that the company has power over the investee, through participation in the investee's

are exposed to variable returns from related activities and have the ability to use their power over the investee to affect the amount of its returns. Relevant activities refer to activities that have a significant impact on the return of the investee

affected activities. The relevant activities of the investee are judged according to the specific circumstances, usually including sales and purchases of goods or services, management of financial assets, assets

acquisition and disposal, research and development activities, and financing activities.

The parent company brings all its subsidiaries (including separate entities controlled by the parent company) into the consolidation scope of the consolidated financial statements, including enterprises controlled by the company

business, the divisible part of the invested unit and the structured entity.

(2) Method for preparing consolidated financial statements

The parent company prepares consolidated financial statements, and regards the entire enterprise group as an accounting entity;

Based on the financial statements and other relevant information, the consolidated financial statements are prepared to reflect the overall financial status, operating results and cash flow of the enterprise group.

ÿ Consolidate the assets, liabilities, owner's equity, income, expenses and cash flow of the parent company and subsidiaries.

ÿ Offset the parent company's long-term equity investment in the subsidiary and the parent company's share in the subsidiary's owner's equity.

ÿ Offset the impact of internal transactions between the parent company and its subsidiaries, and between subsidiaries. If the internal transaction shows that the relevant asset has an impairment loss, it shall be fully

Amount to confirm this part of the loss.

ÿ Adjust special transactions from the perspective of enterprise groups.

Minority shareholders' equity is listed as "minority shareholders' equity" under the owner's equity item in the consolidated balance sheet. Minority interest profit or loss, in consolidated profit

In the table, under the item of net profit, it is listed as the item of "Minority Shareholders' Profit and Loss". In the consolidated financial statements, the current loss shared by the minority shareholders of the subsidiary exceeds the minority shareholders

For the shares enjoyed by the subsidiary in the initial owner's equity, the balance shall still offset the minority shareholders' equity.

When the company prepares the consolidated financial statements, if the accounting policies and accounting periods adopted by the subsidiaries are inconsistent with those of the parent company, it needs to follow the accounting policies of the parent company.

According to the accounting policy and accounting period of the parent company, make necessary adjustments to the financial statements of the subsidiaries;

report.

During the reporting period, the parent company shall adjust the consolidated assets and liabilities when preparing the consolidated balance sheet for the subsidiaries and businesses increased due to the business combination under the same control.

At the same time, the relevant items in the comparative statement are adjusted, as if the consolidated reporting entity has always existed since the time when the ultimate controller began to control. because

For subsidiaries and businesses increased by business combination not under common control, the opening balance of the consolidated balance sheet shall not be adjusted when preparing the consolidated balance sheet. The parent company is reporting

When disposing of subsidiaries and businesses during the reporting period and preparing the consolidated balance sheet, the opening balance of the consolidated balance sheet will not be adjusted.

For subsidiaries and businesses increased by the parent company due to business combination under the same control during the reporting period, the number of subsidiaries and business combinations from the beginning of the current period to the end of the reporting period

Income, expenses and profits are included in the consolidated income statement. At the same time, adjustments are made to the relevant items of the comparative statements, as if the consolidated reporting entity has always existed since the time when the ultimate

controller began to control. For the subsidiaries and businesses increased due to the business combination not under the same control, the income,

Expenses and profits are included in the consolidated income statement. When the parent company disposes of subsidiaries and businesses during the reporting period, the income and expenses of the subsidiaries and businesses from the beginning of the period to the date of disposal

Use and profit are included in the consolidated income statement.

For subsidiaries and businesses increased by the parent company due to business combination under the same control during the reporting period, the number of subsidiaries and business combinations from the beginning of the current period to the end of the reporting period

The cash flow is included in the consolidated cash flow statement, and the relevant items in the comparative statement are adjusted at the same time, as if the consolidated reporting entity has always existed since the time when the ultimate controller began to control it.

For subsidiaries and businesses increased due to business combinations not under common control, the cash flow from the purchase date of the subsidiaries and businesses to the end of the reporting period shall be included in

included in the consolidated cash flow statement. When the parent company disposes of a subsidiary during the reporting period, the subsidiary and the cash flow from the beginning of the business period to the date of disposal are included in the consolidated cash flow

surface.

The long-term equity investment of the parent company held by the subsidiary is regarded as the treasury stock of the enterprise group, and as the deduction of the owner's equity, the owner in the consolidated balance sheet

Under the equity item, it is listed as "minus: treasury stock". The long-term equity investment held by subsidiaries among each other is offset against the parent company's equity investment in subsidiaries

The method is to offset the long-term equity investment and its share in the owner's equity of the corresponding subsidiary.

(3) Accounting treatment of special transactions in the preparation of consolidated financial statements

ÿ When the parent company purchases the equity of the subsidiary owned by the minority shareholders of the subsidiary, in the consolidated financial statements, the long-term equity investment newly acquired due to the purchase of minority

According to the newly added shareholding ratio, the difference between the net asset shares that should be enjoyed by the subsidiary continuously calculated from the purchase date or the merger date shall be adjusted to the capital reserve (capital premium

or share premium), if the capital reserve is insufficient to offset, the retained earnings shall be adjusted.

ÿ If the enterprise is able to exercise control over the investee not under the same control due to additional investment and other reasons, in the consolidated financial statements, for the invested party held before the purchase date

The equity of the purchased party shall be re-measured according to the fair value of the equity on the purchase date, and the difference between the fair value and its book value shall be included in the current investment income;

If the equity of the acquiree held before the purchase date involves other comprehensive income calculated under the equity method, other comprehensive income related to it shall be transferred to the current period of the purchase date.

period income.

ÿ When the parent company partially disposes of the long-term equity investment in the subsidiary without losing control, in the consolidated financial statements, the disposal price corresponds to the disposal of the long-term equity investment and enjoys the

continuous calculation of the subsidiary's net income from the purchase date or the merger date. The difference between the asset shares should be adjusted to the capital reserve (capital premium or share

premium), if the capital reserve is insufficient to offset, the retained earnings shall be adjusted.

ÿ If the enterprise loses control over the investee due to the disposal of part of the equity investment, etc., when preparing the consolidated financial statements, the remaining equity shall be calculated according to its

The fair value at the date of loss of control is remeasured. The sum of the consideration obtained from the disposal of equity and the fair value of the remaining equity, minus the entitlement calculated based on the original shareholding ratio

The difference between the shares of the net assets of the existing subsidiaries that have been continuously calculated since the purchase date or the merger date shall be included in the investment income of the current period when the control right is lost, and shall be written off at the same time.

goodwill. Other comprehensive income related to the original subsidiary's equity investment shall be converted into current investment income when control is lost.

ÿ Where an enterprise disposes of its equity investment in subsidiaries step by step through multiple transactions until it loses control, if it disposes of its equity investment in subsidiaries until it loses control

If each transaction belongs to a package deal, each transaction shall be accounted for as a transaction for disposing of a subsidiary and losing control;

The difference between the previous disposal payment and the share of the subsidiary's net assets corresponding to the disposal investment shall be recognized in the consolidated financial statements as other comprehensive income.

When the control right is transferred to the profit and loss of the current period when the control right is lost. The terms, conditions and economic impact of each transaction for disposing of equity investments in subsidiaries comply with one of the following:

or multiple situations, accounting for multiple transactions as a package transaction:

A. These transactions are entered into at the same time or with mutual influence considered.

B. Only when these transactions are integrated can a complete commercial result be achieved.

C. The occurrence of a transaction depends on the occurrence of at least one other transaction.

D. A transaction is uneconomical when considered alone, but economical when considered together with other transactions.

7. Classification of joint arrangements and accounting treatment of joint operations

(1) Classification of joint arrangements

A joint arrangement refers to an arrangement under the joint control of two or more parties. Joint venture arrangements are divided into joint operations and joint ventures. joint operation,

Refers to the joint venture arrangement in which the joint venture party enjoys the relevant assets of the arrangement and assumes the relevant liabilities of the arrangement. A joint venture means that the joint venture party only has the right to the net assets of the arrangement

profitable joint venture arrangements.

(2) Accounting treatment method for joint operation

The company confirms the following items related to the interest share in the joint operation, and conducts accounting treatment in accordance with the provisions of the relevant accounting standards for enterprises:

ÿ Confirm the assets held separately and the assets jointly held according to their shares;

ÿ Recognize the liabilities assumed individually and the liabilities assumed jointly according to their shares;

ÿ To confirm the income generated from the sale of its share of joint operation output;

ÿ Recognize the income generated by the joint operation from the sale of output according to its share;

ÿ Confirm the expenses incurred independently, and confirm the expenses incurred in joint operation according to its share.

8. Determination criteria for cash and cash equivalents

Cash refers to the company's cash on hand and deposits that can be used for payment at any time. Cash equivalents refer to the short-term assets held by the enterprise (generally referred to as

(due within 3 months from the purchase date), highly liquid investments that are readily convertible into known amounts of cash and that are subject to an insignificant risk of value change.

9. Foreign currency business and translation of foreign currency statements

(1) The method for determining the conversion rate when a foreign currency transaction occurs

The foreign currency transactions of the company are initially confirmed at the spot exchange rate on the transaction day (usually refers to the middle price of the foreign exchange rate announced by the People's Bank of China on that day,

The same below) is converted into the RMB amount.

(2) The conversion method of foreign currency items and the treatment method of exchange gains and losses on the balance sheet date

Foreign currency monetary items are converted at the spot exchange rate on the balance sheet date. Due to the difference between the spot exchange rate on the balance sheet date and the initial recognition or the previous balance sheet date

Exchange differences arising from different spot exchange rates, except in accordance with the provisions of the "Accounting Standards for Business Enterprises No. 17 - Borrowing Costs", which are in accordance with the capitalization requirements of purchase, construction or production

In addition to capitalizing the exchange difference arising from foreign currency borrowings related to the assets of the project, it is included in the current profit and loss. Foreign currency non-monetary items measured at historical cost shall still be

The conversion at the spot exchange rate on the date of the transaction does not change the amount in the recording currency. For non-monetary items in foreign currency such as stocks and funds measured at fair value, the fair value shall be adopted

The spot exchange rate on the value determination date is converted, and the difference between the converted bookkeeping functional currency amount and the original bookkeeping functional currency amount is treated as fair value changes (including exchange rate changes) shall be included in the current profit and loss.

(3) Accounting treatment method for conversion of foreign currency statements

The company converts financial statements expressed in foreign currencies into financial statements expressed in RMB in accordance with the following regulations.

The asset and liability items in the balance sheet are converted at the spot exchange rate on the balance sheet date; the owner's equity items, except for the "undistributed profit" item, are

Other items are converted at the spot exchange rate at the time of occurrence. The income and expense items in the income statement shall be converted at the approximate exchange rate of the spot exchange rate on the transaction date. according to

The conversion difference of foreign currency financial statements arising from the conversion by the above methods shall be listed separately in the owner's equity item "other comprehensive income" in the balance sheet. expressed in foreign currency

The cash flow statement shall be converted at the approximate exchange rate of the spot exchange rate on the day when the cash flow occurs. The impact of exchange rate changes on cash is used as a reconciling item in the cash flow statement reported separately.

10. Financial instruments

(1) Classification of financial assets and financial liabilities

Financial assets are divided into the following three categories at the time of initial recognition: y Financial assets measured at amortized cost; y Financial assets measured at fair value and whose changes are included in other comprehensive yFinancial assets measured at fair value through profit or loss.

Financial liabilities are divided into the following four categories at the time of initial recognition: yFinancial liabilities measured at fair value and whose changes are included in current profit and loss; yFinancial assets transferred without Financial liabilities that meet the conditions for derecognition or continue to be involved in the transferred financial assets;

y Loan commitments that are lower than the market interest rate; y Financial liabilities measured at amortized cost.

(2) Recognition basis, measurement method and derecognition of financial assets and financial liabilities

y Recognition basis and initial measurement method of financial assets and financial liabilities

When a company becomes a party to a financial instrument contract, it recognizes a financial asset or financial liability. When initially recognizing financial assets or financial liabilities, the fair value measurement;

For financial assets and financial liabilities at fair value through profit or loss, relevant transaction expenses are directly included in current profit or loss; for other types of financial assets or financial liabilities, relevant transaction expenses are included in the initially recognized amount. However, the company's initially recognized accounts receivable did not contain significant financing components or public

If the company does not consider the financing component in the contract of less than one year, the initial measurement shall be made according to the transaction price.

y Subsequent measurement method of financial assets

A. Financial assets measured at amortized cost

Subsequent measurement is carried out at amortized cost using the actual interest rate method. arising from financial assets measured at amortized cost that are not part of any hedging relationship

The profit or loss of the company shall be included in the current profit and loss when it is derecognized, reclassified, amortized according to the actual interest rate method or recognized as depreciation.

B. Debt instrument investments measured at fair value and whose changes are included in other comprehensive income

Subsequent measurement is carried out using fair value. Interest calculated using the effective interest rate method, impairment losses or gains, and exchange gains and losses are included in the current profit and loss, and other gains or

The loss is recognized in other comprehensive income. When derecognition is terminated, the accumulated gains or losses previously included in other comprehensive income are transferred out of other comprehensive income and included in the current loss beneficial.

C. Investment in equity instruments measured at fair value and whose changes are included in other comprehensive income

Subsequent measurement is carried out using fair value. Dividends obtained (except for those that are part of the recovery of investment costs) are included in the current profit and loss, and other gains or losses are included in other his comprehensive income. When derecognition is terminated, the accumulated gains or losses previously included in other comprehensive income are transferred out of other comprehensive income and included in retained earnings.

D. Financial assets measured at fair value through profit or loss

Subsequent measurement is carried out using fair value, and the resulting gains or losses (including interest and dividend income) are included in current profit and loss, unless the financial asset is a hedge part of the relationship.

y Subsequent measurement method of financial liabilities

A. Financial liabilities measured at fair value and whose changes are included in current profit and loss

Such financial liabilities include trading financial liabilities (including derivatives belonging to financial liabilities) and financial liabilities designated to be measured at fair value and whose changes are included in current profit and loss financial liabilities. Such financial liabilities are subsequently measured at fair value. Designated as measured at fair value due to changes in the company's own credit risk and its changes

The amount of changes in the fair value of financial liabilities that are automatically recognized in profit or loss is included in other comprehensive income, unless this treatment will cause or expand an accounting mismatch in profit or loss. Other gains or losses arising from such financial liabilities (including interest expenses, excluding changes in fair value due to changes in the company's own credit risk) are included in current profit and loss, unless the financial liabilities are part of a hedging relationship. When derecognition is terminated, the accumulated gains or losses previously included in other comprehensive income are transferred out of other comprehensive income,

Included in retained earnings.

B. The transfer of financial assets does not meet the conditions for derecognition or the financial liabilities formed by continuing to be involved in the transferred financial assets shall be in accordance with the "Accounting Standards for Business Enterprises No. 23—Financial Asset Transfer" for measurement.

C. Financial guarantee contracts that do not fall under \bar{y} or \bar{y} above, and loan commitments that do not fall under \bar{y} above and are loaned at a rate lower than the market

Subsequent measurement shall be carried out with the higher of the two listed amounts: I The amount of loss provision determined in accordance with the provisions on impairment of financial instruments; II The amount initially recognized is deducted according to the relevant Specifies the balance after the accumulated amortization amount determined.

D. Financial liabilities measured at amortized cost

Measured at amortized cost using the effective interest method. Gains or losses on financial liabilities measured at amortized cost that are not part of any hedging relationship

The loss shall be included in the current profit and loss when it is derecognized and amortized according to the actual interest rate method.

\bar{y} Derecognition of financial assets and financial liabilities

A. Derecognition of financial assets when one of the following conditions is met:

- a. The contractual right to receive the cash flow of the financial asset has terminated;
 - b. The financial assets have been transferred, and the transfer complies with the regulations on derecognition of financial assets in Accounting Standards for Business Enterprises No. 23 - Transfer of Financial Assets.
- B. When the current obligation of the financial liability (or part of it) has been discharged, the financial liability (or part of the financial liability) should be derecognized accordingly.

(3) Recognition basis and measurement method for transfer of financial assets

If the company has transferred almost all the risks and rewards of the ownership of the financial asset, the financial asset shall be derecognized, and the rights and obligations arising or retained during the transfer shall be

The transferred financial assets are recognized as assets or liabilities separately; if almost all the risks and rewards of ownership of the financial assets are retained, the transferred financial assets shall continue to be recognized. The company has neither

If almost all the risks and rewards of ownership of the financial asset are transferred or not retained, the following situations shall be dealt with respectively: \bar{y} If the control over the financial asset is not retained, the final stop recognizing the financial asset, and separately recognize the rights and obligations arising or retained during the transfer as assets or liabilities; \bar{y} if control over the financial asset is retained, the

The degree of continuous involvement in the transferred financial assets shall be recognized as relevant financial assets, and relevant liabilities shall be recognized accordingly.

If the overall transfer of financial assets satisfies the conditions for derecognition, the difference between the following two amounts shall be included in the current profit and loss: \bar{y} The transfer of financial assets on the date of derecognition Book value; \bar{y} The consideration received for the transfer of financial assets, and the cumulative amount of changes in fair value that were originally included in other comprehensive income that correspond to derecognition

The sum of the amount (the financial assets involved in the transfer are debt instrument investments measured at fair value and whose changes are included in other comprehensive income), transferred financial assets part, and the transferred part as a whole satisfies the conditions for derecognition, the book value of the financial assets before the transfer as a whole shall be included in the derecognition part and the continuation recognition part

Between them, they will be apportioned according to their respective relative fair values on the transfer date, and the difference between the following two amounts will be included in the current profit and loss: \bar{y} The book value of the derecognized part; \bar{y} The consideration of the derecognized part, which is directly included in other comprehensive income The amount corresponding to the derecognition part of the cumulative amount of fair value changes (involving transfer

Financial assets are the sum of debt instrument investments measured at fair value through other comprehensive income).

(4) Determination method of fair value of financial assets and financial liabilities

Fair value refers to the price received by selling an asset or paid for transferring a liability in an orderly transaction between market participants on the measurement date.

grid. The company's fair value measurement is carried out in accordance with the relevant provisions of "Accounting Standards for Business Enterprises No. 39 - Fair Value Measurement", specifically including:

\bar{y} Initial measurement of fair value

The company judges whether the fair value at initial recognition is equal to its transaction price based on the nature of the transaction and the characteristics of the relevant assets or liabilities. Other related meetings

Accounting standards require or allow enterprises to initially measure relevant assets or liabilities at fair value, and the transaction price is not equal to the fair value, the company will

Gains or losses are included in the current profit and loss, unless otherwise stipulated by other relevant accounting standards.

\bar{y} Valuation techniques for fair value

The valuation techniques used by the Company to measure related assets or liabilities at fair value mainly include market approach, income approach and cost approach. The Company uses a variety of valuation techniques

When measuring the fair value technically, the rationality of each valuation result will be fully considered, and the amount that best represents the fair value under the current circumstances will be selected as the fair value. company in

In the application of valuation techniques, the relevant observable input values are used first, and only when the relevant observable input values are unavailable or impractical to obtain, the relevant observable input values are used.

Use unobservable input values.

γLevel division of fair value

The company divides the input values used in fair value measurement into three levels, and firstly uses the first level input value, and secondly uses the second level input value,

Finally enter the value using the third level.

The first-level input value is the unadjusted quoted price in an active market for the same asset or liability that can be obtained on the measurement date. The input value of the second level is divided by the first level

Input values that are directly or indirectly observable for related assets or liabilities other than secondary input values. The third-level input value is the unobservable input value of related assets or liabilities.

The above division of levels is specifically manifested as: if there is an active market for a financial instrument, the Company shall determine its fair value using the quotation in the active market. active market

The quoted price refers to the price that is easy to obtain regularly from exchanges, brokers, industry associations, pricing service agencies, etc., and represents the actual market price in fair transactions.

The price of the transaction. If there is no active market for financial instruments, the company uses valuation techniques to determine its fair value. Valuation techniques include reference to prices used in recent market transactions between

knowledgeable and voluntary parties, reference to the current fair value of another financial instrument that is substantially the same, discounted cash flow analysis and futures

pricing model, etc.

(5) Offset of financial assets and financial liabilities

Financial assets and financial liabilities are listed separately in the balance sheet and are not offset against each other. However, if the following conditions are met at the same time, the company shall use the net amount after offsetting each other in

Listed in the balance sheet: γThe company has the legal right to offset the recognized amount, and this legal right is currently enforceable; γThe company plans to settle the amount on a net basis

liquidation, or realize the financial asset and pay off the financial liability at the same time.

For the transfer of financial assets that do not meet the conditions for derecognition, the company will not offset the transferred financial assets and related liabilities.

(6) Impairment of financial assets

The financial assets that the company needs to recognize impairment losses are financial assets measured at amortized cost, debts measured at fair value and whose changes are included in other comprehensive income

Investment in financial instruments and lease receivables, mainly including bills receivable, accounts receivable, other receivables, long-term receivables, etc. In addition, for some financial guarantee contracts,

Provision for impairment and recognition of credit impairment losses are also made in accordance with the accounting policies described in this section.

γFinancial asset impairment test method and accounting treatment method

The Company's financial assets measured at amortized cost, debt instrument investments at fair value through other comprehensive income, and financial guarantee contracts

Similarly, the loss provision is recognized on the basis of expected credit losses. Consider reasonable and evidence-based information about past events, current conditions, and forecasts of future economic conditions

Taking the risk of default as the weight to calculate the probability-weighted amount of the present value of the difference between the cash flow receivable of the contract and the cash flow expected to be received

amount, confirm the expected credit loss. On each balance sheet date, the company measures the expected credit losses of financial instruments at different stages. gold

If the credit risk of the financial instrument has not increased significantly since the initial recognition, it is in the first stage, and the company measures the loss provision according to the expected credit loss within the next 12 months;

If the credit risk of a financial instrument has increased significantly since the initial recognition but no credit impairment has occurred, it is in the second stage.

The loss provision is measured by the expected credit loss; if the financial instrument has been credit-impaired since the initial recognition, it is in the third stage, and the company shall

Renewed expected credit losses are measured as loss allowances. For financial instruments with low credit risk on the balance sheet date, the Company assumes that the credit risk has been

After confirmation, there is no significant increase, and the loss provision is measured according to the expected credit loss within the next 12 months. The company is in the first and second stages, and relatively

For financial instruments with low credit risk, the interest income is calculated according to its book balance and actual interest rate without deduction of impairment provisions. For financial instruments in the third stage,

Interest income is calculated based on the book balance minus the amortized cost and the actual interest rate.

For accounts receivable, regardless of whether there is a significant financing component, the company considers all reasonable and substantiated information, including forward-looking information, to single or group

Estimate the expected credit loss of the above-mentioned receivables in a combined way, and adopt the simplified model of expected credit loss, always according to the expected credit loss of the entire duration

Provision for mismeasurement losses. The calculation method is as follows:

Aγ At the end of the period, a separate impairment test is performed on receivables with objective evidence that they have been impaired.

The difference in value is recognized as an impairment loss, and the expected credit loss is accrued.

Bγ When a single financial asset cannot assess the expected credit loss information at a reasonable cost, the company divides the receivables portfolio according to the credit risk characteristics, and

ECLs are calculated on a portfolio basis. For the receivables classified as risk portfolios, the company refers to the historical credit loss experience, combined with the current situation and the

Forecasts of future economic conditions, using impairment provision models to calculate expected credit losses. The company will include the provision for loss accrued or reversed into the current profit and loss.

11. Notes receivable

The company measures the loss provision for the notes receivable according to the expected credit loss amount equivalent to the entire duration. Based on the credit risk characteristics of notes receivable,

Divide it into different combinations:

project	The basis for determining the combination
Notes Receivable Portfolio 1	banker's acceptance
Notes Receivable Portfolio 2	trade acceptance draft

For the bills receivable divided into combinations, the company refers to the historical credit loss experience, combines the current situation and the forecast of the future economic situation, and calculates the expected credit

Use loss.

12. Accounts receivable

For accounts receivable, regardless of whether it contains a significant financing component or not, the company measures its loss allowance based on the amount equivalent to the expected credit loss during the entire duration.

The resulting increase or reversal of the loss provision is included in the current profit and loss as an impairment loss or gain. The calculation method is as follows:

a. If there is objective evidence that a certain account receivable has been credit-impaired, the company shall accrue expected credit losses for the account receivable individually.

Judgment basis or amount standard for single significant amount	The amount is greater than 5 million yuan
Perform aging analysis on receivables with significant single amount and single withdrawal expectation letter, and determine the recoverable amount of receivables in combination with the actual financial losses of the debtor unit and the cash flow situation According to the difference between the present value of the estimated future cash flow and its book value, the credit impairment loss shall be withdrawn and included in the current profit and loss. Individually test receivables that have not been impaired, and classify them into corresponding groups to accrue expected credit losses	

b. When a single financial asset cannot assess the expected credit loss information at a reasonable cost, the company divides the accounts receivable portfolio according to the credit risk characteristics, and

Calculate expected credit losses on a consolidated basis.

For receivables that have not been individually withdrawn after separate testing, the expected credit loss is withdrawn based on the following credit risk combinations.

combination name	Accrual method for expected credit losses
Accounts receivable combination 1: payment for goods or current payment	Provision based on expected credit loss rate
Accounts receivable combination 2: Amounts from related parties within the scope of consolidation	With reference to historical credit loss experience, combined with current conditions and forecasts of future economic conditions, the portfolio is not expected to generate credit losses

c. Accounts receivable with insignificant single amount but separate provision for expected credit losses

Reasons for accruing expected credit losses individually	There is solid evidence of clear differences in recoverability
Accrual method of expected credit loss	The difference between the present value of future cash flow of accounts receivable and the present value of future cash flow of the combination of accounts receivable according to the credit risk characteristics is to accrue expected credit losses.

The impairment test is carried out separately, and the expected credit loss is accrued based on the difference between the present value of the estimated future cash flow and its book value, which is included in the current profit and loss. test alone

Accounts receivable that have not been impaired shall be included in the corresponding portfolio to accrue expected credit losses.

13. Accounts receivable financing

none

14. Other receivables

Determination method and accounting treatment method of expected credit loss of other receivables

Based on whether the credit risk of other receivables has increased significantly since the initial recognition, the company adopts the expected value equivalent to the next 12 months or the entire duration

The amount of the credit loss is measured as an impairment loss. Except for other receivables whose credit risk is evaluated individually, they are divided into different groups based on their credit risk characteristics:

project	Accrual method for expected credit losses
Other receivables portfolio 1: Guarantee deposits, internal reserves and other funds refer to historical credit loss experience, combined with current conditions and forecasts of future economic conditions, this portfolio is not expected to generate credit losses	
Other receivables group 2: Current accounts and others	Provision based on expected credit loss rate

15. Inventory

(1) Inventory category

The company's inventory mainly includes raw materials, work in progress, turnover materials, low-value consumables, finished products (stock commodities), etc.

(2) Valuation method for dispatched inventory

The delivery of inventories is accounted for using the weighted average method;

(3) The basis for determining the net realizable value of different types of inventories and the method of accruing inventory depreciation reserves

At the end of the interim period and the end of the year, the company's inventories are measured at the lower of cost and net realizable value. On the basis of a comprehensive inventory of the inventory, the company Due to reasons such as mildew and deterioration, continuous decline in market prices and no hope of recovery in the foreseeable future, all or part of them being obsolete, and product replacement, etc., the inventory becomes If the cost is higher than its net realizable value, the inventory depreciation reserve shall be withdrawn and included in the current profit and loss.

The company makes inventory depreciation reserves according to individual inventory items.

Net realizable value is the estimated selling price of the inventory minus the estimated cost to be incurred until completion, estimated sales expenses and related taxes during the normal production process.

Amount after fee.

(4) Inventory inventory system

The inventory system of inventories is perpetual inventory system.

(5) Amortization method of low-value consumables and packaging

Low-value consumables are amortized by the one-time amortization method when they are used; packaging materials are amortized by the one-time amortization method when they are used.

16. Contract assets

A contract asset is a company's right to receive consideration for a good it has transferred to a customer, and that right depends on factors other than the passage of time. under the same contract

Contract assets and contract liabilities are listed in net amount, and if the net amount is the debit balance, it is listed in the item of "contract assets" or "other non-current assets" according to its liquidity;

If the amount is the credit balance, it shall be listed in the item of "contract liabilities" or "other non-current liabilities" according to its liquidity.

See 12. Accounts receivable for details of the company's determination method and accounting treatment method for the expected credit loss of contract assets.

17. Contract costs

1. Method for determining the amount of assets related to contract costs

Assets related to contract costs include contract performance costs and contract acquisition costs.

Contract fulfillment cost, the cost incurred by the company to fulfill the contract, which does not fall within the scope of other company accounting standards and meets the following conditions at the same time, is considered as a contract

Fulfillment costs are recognized as an asset:

(1) The cost is directly related to a current or anticipated contract, including direct labor, direct materials, overhead (or similar),

Costs borne by the customer and other costs incurred solely as a result of this contract;

(2) The cost increases the company's resources for fulfilling performance obligations in the future;

(3) The cost is expected to be recoverable. The cost of obtaining the contract, the incremental cost incurred by the company to obtain the contract is expected to be recoverable, and it is recognized as the cost of obtaining the contract

It is regarded as an asset; if the amortization period of the asset is not more than one year, it shall be included in the current profit and loss when it occurs.

The contract acquisition cost, the incremental cost incurred by the company to obtain the contract is expected to be recoverable, and is recognized as an asset as the contract acquisition cost. incremental cost, Refers to the costs (such as sales commissions, etc.) that the company would not have incurred if it had not obtained the contract. In addition to the expected recoverable incremental costs incurred by the company to obtain the contract Other expenses (such as travel expenses that will occur regardless of whether the contract is obtained, etc.), shall be included in the current profit and loss when incurred, except for those clearly borne by the customer.

2. Amortization of assets related to contract costs

The company's assets related to contract costs are amortized on the same basis as the recognition of commodity revenue related to the assets, and are included in the current profit and loss.

3. Impairment of assets related to contract costs

When the company determines the impairment loss of assets related to the contract cost, it firstly recognizes other assets related to the contract that are recognized in accordance with other relevant company accounting standards. Determine the impairment loss.

For assets related to contract costs, if the book value is higher than the difference between the following two items, the company shall make provision for impairment for the excess part and recognize it as asset impairment loss lose:

- 1. The remaining consideration expected to be obtained from the transfer of goods or services related to the asset;
- 2. Estimated costs to be incurred for the transfer of the relevant goods or services.

18. Assets held for sale

(1) Confirmation standard

Enterprise components (or non-current assets, the same below) that meet the following conditions at the same time should be recognized as held for sale: the component must be in its current condition An immediate sale is available only on terms customary to the sale of such components; the business has resolved to dispose of the component, subject to shareholder approval if required If it is approved by the general meeting of shareholders or the corresponding authority; the enterprise has signed an irrevocable transfer agreement with the transferee; the transfer will be completed within one year. completed within.

(2) Accounting treatment method

For the fixed assets held for sale, the company adjusts the estimated net salvage value of the fixed assets so that the estimated net salvage value of the fixed assets can reflect its fair value The amount after deducting the disposal expenses, but shall not exceed the original book value of the fixed asset when it meets the conditions for holding for sale, and the original book value is higher than the estimated net value after adjustment. The difference of the residual value shall be included in the current profit and loss as asset impairment loss. An asset or disposal group is classified as held for sale, but later no longer meets the recognition conditions for fixed assets held for sale, and the company stops classifying it as held for sale held for sale, and shall be measured at the lower of the following two amounts: (1) The book value of the asset or disposal group before it is classified as held for sale, assuming that there is no The adjusted amount of depreciation, amortization or impairment that should have been recognized in the case of being classified as held for sale; (2) The recovered amount on the date when it is decided not to sell.

19. Debt investment

none

20. Other debt investments

none

21. Long-term receivables

Based on whether its credit risk has increased significantly since the initial recognition, the company adopts the expected credit loss equivalent to the next 12 months or the entire duration The amount is used to measure the impairment loss of long-term receivables. Except for the long-term receivables whose credit risk is evaluated individually, they are divided into different groups based on their credit risk characteristics combine:

project	The basis for determining the combination
Long-term receivables portfolio 1	Lease receivable

Long-term receivables portfolio 2	Other long-term receivables receivable
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For the long-term receivables divided into combinations, the company refers to the historical credit loss experience, combines the current situation and the forecast of the future economic situation, and calculates the expected credit loss.

22. Long-term equity investment

Long-term equity investment refers to the equity investment in which the investor exercises control and significant influence on the invested entity, as well as the equity investment in its joint venture.

(1) Judgment criteria for joint control and significant influence

Joint control refers to the joint control of an arrangement according to the relevant agreement, and the relevant activities of the arrangement must be agreed upon by the parties sharing the control.

Decisions can only be made after consent.

Significant influence means that the investor has the power to participate in the decision-making of the financial and operating policies of the invested entity, but cannot control or jointly invest with other parties.

control the development of these policies. When determining whether it is possible to exert a significant influence on the invested unit, it should be considered that the invested unit held by the investor and other parties can be transferred in the current period.

Potential voting rights factors such as exchanging corporate bonds and current executable warrants. If the investor is able to exert significant influence on the invested unit, the invested unit is its associate enterprise.

(2) Determination of initial investment cost

ÿ For the long-term equity investment formed by the merger of the Company, the initial investment cost shall be determined according to Note 4.5.

ÿ Except for the long-term equity investment formed by the merger of the Company, the initial investment cost of the long-term equity investment acquired by other means shall be determined according to the following provisions:

For a long-term equity investment obtained by paying cash, the actual purchase price paid shall be regarded as the initial investment cost. The initial investment cost includes and obtains long-term

Expenses, taxes and other necessary expenses directly related to equity investment.

For long-term equity investments obtained by issuing equity securities, the fair value of the issued equity securities shall be used as the initial investment cost, and the issuance of equity certificates

The expenses directly related to the bonds shall be determined in accordance with the relevant provisions of the Accounting Standards for Business Enterprises No. 37 - Presentation of Financial Instruments.

For long-term equity investment obtained through non-monetary asset exchange, the initial investment cost shall be in accordance with "Accounting Standards for Business Enterprises No. 7 - Non-monetary Asset Exchange"

The relevant regulations are determined.

For long-term equity investment obtained through debt restructuring, the initial investment cost shall be determined in accordance with the relevant provisions of "Accounting Standards for Business Enterprises No. 12 - Debt Restructuring".

(3) Subsequent measurement and profit and loss recognition method

The long-term equity investment that the investor can exercise control over the invested unit shall be accounted for using the cost method;

Long-term equity investment is accounted for using the equity method. The investor's equity investment in associates, part of which is through venture capital institutions, mutual funds, and trust companies

companies or similar entities including investment-linked insurance funds, regardless of whether the above-mentioned entities have a significant influence on this part of the investment, they can

This part of the investment is measured at fair value with changes included in profit or loss, and the remaining part is accounted for using the equity method.

ÿ For long-term equity investments calculated using the cost method, the cost of long-term equity investments shall be adjusted for additional or withdrawn investment;

Profits or profits are recognized as investment income for the current period.

ÿ For long-term equity investments accounted for using the equity method, the initial investment cost of the long-term equity investment is greater than the fair value of the identifiable net assets of the investee that should be enjoyed at the time of investment.

value share, the initial investment cost of the long-term equity investment will not be adjusted; the initial investment cost of the long-term equity investment is less than the identifiable

If the share of the fair value of net assets, the difference is included in the current profit and loss, and the cost of long-term equity investment is adjusted at the same time. The fair value of the identifiable net assets of the investee,

Determined by referring to the relevant provisions of "Accounting Standards for Business Enterprises No. 20 - Business Combinations".

After the company obtains long-term equity investment, it shall recognize or share the share of the net profit or loss and other comprehensive income realized by the invested unit in the current year, respectively.

Recognize investment income and other comprehensive income, and adjust the book value of long-term equity investment at the same time. Calculate the entitlement according to the profits or cash dividends declared by the investee

For some parts, the book value of the long-term equity investment will be reduced accordingly;

For other changes in equity, the book value of the long-term equity investment is adjusted and included in the owner's equity. When confirming the share of the net profit or loss of the invested unit that should be enjoyed or shared,

Based on the fair value of the investee's identifiable net assets when the investment is obtained, the net profit of the investee is adjusted and confirmed, adopted by the invested unit

Accounting policies and accounting periods that are inconsistent with the company's, provision based on the fair value of the investee's fixed assets and intangible assets when the company obtains the investment

The depreciation amount or amortization amount, as well as the asset impairment reserve amount calculated and determined based on the fair value of the relevant assets when the company obtains the investment, etc.

Adjust the impact of profits, and offset the internal transaction gains and losses between the company and associates and joint ventures, and recognize investment losses on this basis

income and other comprehensive income. The internal transaction losses between the company and the invested units are classified as "Accounting Standards for Business Enterprises No. 8 - Impairment of Assets" and other regulations.

The full amount is recognized for asset impairment losses.

When confirming the net loss of the invested unit that should be shared, the long-term equity investment and other long-term equity that substantially constitute the net investment in the invested unit

It shall be recorded up to zero (except that the investment enterprise has the obligation to bear additional losses); if the invested unit realizes profits in subsequent periods, after the profit share exceeds the unrecognized loss share, the unrecognized loss share shall be The book value of the long-term equity and long-term equity investment shall be restored sequentially.

23. Investment real estate

Investment real estate measurement model

cost method measurement

Depreciation or Amortization Method

The buildings leased out of the company's investment real estate are depreciated using the straight-line method, and the specific accounting policy is the same as that of fixed assets. investment real estate

The leased land use rights and the land use rights held and prepared to be transferred after appreciation are amortized using the straight-line method, and the specific accounting policy is the same as that of intangible assets.

24. Fixed assets

(1) Confirmation conditions

The company's fixed assets refer to tangible assets held for the production of goods, provision of labor services, leasing or operation and management, with a useful life of more than one fiscal year. exist

Fixed assets can only be recognized when the following conditions are met at the same time:

•The economic benefits related to the fixed assets are likely to flow into the enterprise.

•The cost of the fixed asset can be measured reliably.

(2) Depreciation method

Category depreciation method	Average-year method House and	Depreciation period	Residual rate	Annual depreciation rate
equipment Average-year	building machinery and	20-30 years 5-10	5%	3.17%-4.75%
method Means-of-life method for transportation vehicles Other equipments		years 5 years	5%	9.50%-19.00%
The original price of the fixed asset minus the expected net salvage value,		3-5	5%	19.00%
		years	5%	19.00%-31.67%

Depreciation is accrued for the amount after depreciation and impairment provision and the remaining service life. Fixed assets that have reached the intended usable state but have not yet completed the final accounts, according to the

The cost is determined according to the estimated value, and depreciation is provided; after the completion of the final accounts, the original estimated value is adjusted according to the actual cost, but there is no need to adjust the original provision

depreciation amount.

At least at the end of each year, the company shall review the service life, estimated net salvage value and depreciation method of fixed assets.

If there is a discrepancy between the expected life expectancy and the original estimate, corresponding adjustments shall be made.

The company needs to abide by the disclosure requirements of "Chemical Industry-related Business" in the "Guidelines for Self-Regulatory Supervision of Listed Companies of Shenzhen Stock Exchange No. 3 - Industry Information Disclosure". For details of investment in fixed assets and construction projects during the reporting period, please refer to Section 10, VII. 21. Fixed assets and 22. Construction in progress.

(3) Determination basis, valuation and depreciation method of fixed assets under financing lease

not applicable.

25. Construction in progress

The company needs to comply with the disclosure requirements for "business related to the chemical industry" in the "Guidelines for Self-Regulatory Supervision of Listed Companies of Shenzhen Stock Exchange No. 3 - Industry Information Disclosure"

The company's construction in progress is constructed in a self-operated manner.

The company's construction in progress is carried forward to fixed assets when the project is completed and reaches the intended usable state. The criteria for judging the intended usable state shall meet the following conditions

one:

(1) The physical construction (including installation) of the fixed asset has been completed or substantially completed;

(2) Trial production or trial operation has been carried out, and the results show that the assets can operate normally or can stably produce qualified products, or the results of the trial operation show that

it is capable of functioning or doing business;

(3) The amount of expenditure on the fixed assets of this construction is very small or almost no longer occurs;

(4) The purchased fixed assets have met the design or contract requirements, or are basically in line with the design or contract requirements.

Please refer to Section 10, VII, 21. Fixed assets and 22. Construction in progress for details of investment in fixed assets and construction in progress during the reporting period.

26. Borrowing costs

(1) Confirmation principles for capitalization of borrowing costs

Capitalization of borrowing costs can only begin when the following conditions are met at the same time:

• Asset expenditures have occurred, and asset expenditures include cash payments, transfer of non-cash assets or commitments for the purchase, construction or production of assets eligible for capitalization

Expenditures incurred in the form of interest-bearing debts;

• Borrowing costs have already been incurred;

• Necessary purchase, construction or production activities to make the asset reach the intended usable or marketable state have started.

(2) Capitalization period

The capitalization period refers to the period from the start of capitalization of borrowing costs to the cessation of capitalization, excluding the period during which capitalization of borrowing costs is suspended.

If the acquisition, construction or production of assets eligible for capitalization is interrupted abnormally and the interruption lasts for more than 3 months, the capitalization of borrowing costs shall be suspended.

localized. Borrowing expenses incurred during the interruption period are recognized as expenses and included in the current profit and loss until the acquisition and construction of assets or production activities resume. If the interrupt is all

The capitalization of borrowing costs continues to be carried out in the necessary procedures for the purchased, constructed or produced assets that meet the capitalization conditions to reach the intended usable or salable state.

Capitalization of borrowing costs stops when the purchased, constructed or produced assets that meet the capitalization conditions reach the intended usable or salable state. eligible for capitalization

The borrowing expenses incurred after the assets reach the expected usable or salable state shall be recognized as expenses according to the amount incurred when incurred, and included in the current profit and loss.

(3) Calculation method of capitalized amount

During the capitalization period, the capitalized amount of interest (including the amortization of discount or premium) in each accounting period shall be determined according to the following provisions:

• Where special loans are borrowed for the purchase, construction or production of assets eligible for capitalization, the interest expenses actually incurred in the current period of the special loans, minus the unused

The amount of interest income obtained from depositing the borrowed funds used in the bank or the investment income obtained from temporary investment is determined.

• If the general loan is occupied for the purchase, construction or production of assets that meet the capitalization conditions, the company's accumulated asset expenditure exceeds the special loan part of the asset

The weighted average of expenditures is multiplied by the capitalization rate of the general borrowings used to calculate and determine the amount of interest that should be capitalized on the general borrowings. The capitalization rate is based on general borrowing plus

Calculate and determine the average interest rate.

If there is a discount or premium on the loan, the amount of the discount or premium that should be amortized in each accounting period shall be determined according to the actual interest rate method, and the interest amount of each period shall be adjusted. exist

During the capitalization period, the capitalized amount of interest in each accounting period shall not exceed the actual amount of interest incurred on relevant borrowings in the current period. During the capitalization period, foreign currency

The exchange difference between the principal and interest of the loan shall be capitalized and included in the cost of assets eligible for capitalization.

Auxiliary expenses incurred on special borrowings are incurred before the purchased, constructed or produced assets eligible for capitalization reach the intended usable or salable state

If it occurs, it shall be capitalized according to the amount incurred when it occurs, and shall be included in the cost of assets eligible for capitalization;

After the product reaches the intended usable or salable state, it shall be recognized as an expense according to the amount incurred when it occurs, and included in the current profit and loss. Auxiliary to general borrowing

Assistance expenses are recognized as expenses according to the amount incurred when they occur, and are included in the current profit and loss.

27. Biological assets

not applicable

28. Oil and gas assets

not applicable

29. Right-of-use assets

(1) Recognition and initial measurement of right-of-use assets

Right-of-use assets refer to the Company's right to use the leased assets within the lease term. On the commencement date of the lease term, the company does not lease short-term leases and low-value asset leases

Right-of-use assets are recognized for leases other than leases.

The company's right-of-use assets are initially measured at cost. The cost includes: y the initial measurement amount of the lease liability;

If there is a lease incentive, the relevant amount of the lease incentive already enjoyed will be deducted; yThe initial direct expenses incurred by the company;

Costs that are expected to be incurred to remove the leased asset, restore the site where the leased asset is located, or restore the leased asset to the state stipulated in the lease terms.

(2) Depreciation method for right-of-use assets

The company accrues depreciation for the right-of-use assets referring to the relevant depreciation provisions of "Accounting Standards for Business Enterprises No. 4 - Fixed Assets". If the company determines that the lease period expires

If the ownership of the leased asset is obtained upon expiration, depreciation shall be accrued over the remaining useful life of the leased asset. Unable to reasonably ascertain that ownership of the leased asset will be acquired when the lease term expires

If there is a right, depreciation shall be accrued during the shorter period of the lease term or the remaining useful life of the leased asset.

(3) Short-term leasing and leasing of low-value assets

Short-term leases refer to leases with a lease term of not more than 12 months on the commencement date of the lease term. Leasing of low-value assets refers to when a single leased asset is a brand new asset

Lower value leases. The company will include the lease payments of short-term leases and low-value asset leases in the cost of relevant assets or current profit and loss according to the straight-line method or other systematic and reasonable methods during each period of the lease term.

(4) Sale and leaseback transactions

The Company evaluates and determines whether the asset transfer in the sale-and-leaseback transaction is a sale according to the "Accounting Standards for Business Enterprises No. 14 - Revenue". in:

yIf the asset transfer in the sale-and-leaseback transaction is a sale, the portion of the book value of the original asset related to the use right obtained by the leaseback shall be used to measure the amount incurred by the sale-leaseback

The right-of-use asset formed, and only recognize the relevant gain or loss for the rights transferred to the lessor. If the fair value of the sales consideration is different from the fair value of the asset, or the lessor does not collect the rent according to the market price, the company will account for the amount of the sales consideration lower than the market price as prepaid rent, which will be higher than

The payment of the market price is treated as the additional financing provided by the lessor to the company for accounting treatment; at the same time, the relevant sales gains or losses are adjusted according to the fair value. in progress

When making the above adjustments, the company is based on the more easily determined items of the following two items: the difference between the fair value of the sales consideration and the fair value of the asset, the lease contract

The difference between the present value of the payments and the present value of the payments at the market price of the lease.

yIf the asset transfer in the sale and leaseback transaction is not a sale, the company will continue to recognize the transferred asset and at the same time recognize a financial liability equal to the transfer income.

debts, and conduct accounting treatment for the financial liabilities in accordance with "Accounting Standards for Business Enterprises No. 22 - Recognition and Measurement of Financial Instruments"; the lessor does not recognize the transferred assets,

However, a financial asset equal to the transfer income should be recognized, and the financial asset should be recognized in accordance with the "Accounting Standards for Business Enterprises No. 22 - Recognition and Measurement of Financial Instruments".

accounting treatment.

30. Intangible assets

(1) Valuation method, service life, impairment test

(1) Valuation method of intangible assets

The company's intangible assets are initially measured at cost. For purchased intangible assets, the actual cost shall be the price actually paid and related expenditures. investors cast

For the intangible assets purchased, the actual cost shall be determined according to the value stipulated in the investment contract or agreement, but if the value stipulated in the contract or agreement is not fair, the actual cost shall be determined according to the fair value

Book. The cost of self-developed intangible assets is the total expenditure incurred before reaching the intended use.

The follow-up measurement of the company's intangible assets is as follows: y Intangible assets with limited service life are amortized using the straight-line method, and at the end of the year, the use of intangible assets

The service life and amortization method shall be rechecked, and if there is any difference with the original estimate, corresponding adjustment shall be made; y Intangible assets with uncertain service life shall not be amortized, but at the end of the year, the service life shall be rechecked, and when there is conclusive evidence that If its service life is limited, its service life is estimated and amortized on a straight-line basis.

(2) Intangible assets with limited service life, estimated service life

The company usually considers the following factors when estimating the service life of intangible assets with limited service life: yUsual life cycle of products produced by using this asset

information on the period and service life of similar assets that can be obtained; yThe current situation of technology, process, etc. and the estimation of future development trends; yThe assets produced

The market demand for the products or services provided; y the actions expected by current or potential competitors; y the expected maintenance expenditures to maintain the ability of the assets to bring economic benefits, and the company's expected ability to pay related expenditures; y the assets Relevant legal provisions or similar restrictions governing duration, such as royalty periods, leases

yThe correlation with the service life of other assets held by the company, etc.

For intangible assets with limited service life, the amortizable amount shall be systematically and reasonably amortized within the service life. The company adopts the straight-line method for amortization.

(3) Intangible assets with uncertain service life, the basis for judging the indefinite service life and the review procedure for its service life

The company will not be able to foresee the period when the asset will bring economic benefits to the company, or the intangible assets such as indefinite service life are determined as intangible assets with indefinite service life assets.

Judgment basis for uncertain service life: y It comes from contractual rights or other legal rights, but there is no clear service life in contract or law; y Comprehensive

It is still impossible to determine the time limit for the intangible assets to bring economic benefits to the company due to contract industry conditions or relevant expert demonstrations.

At the end of each year, the service life of intangible assets with uncertain service life is reviewed, mainly in a bottom-up manner, and the departments related to the use of intangible assets conduct a review.

Carry out basic review, and evaluate whether there is any change in the judgment basis of uncertain service life, etc.

(2) Accounting policies for internal research and development expenditures

Expenditures in the research stage of internal research and development projects are included in the current profit and loss when they occur; expenditures in the development stage that meet the following conditions at the same time are recognized as intangible

Assets: y It is technically feasible to complete the intangible asset so that it can be used or sold; y There is an intention to complete the intangible asset and use or sell it; y

The way intangible assets generate economic benefits, including the ability to prove that there is a market for the product produced by using the intangible asset or that the intangible asset itself has a market, the intangible asset

It will be used internally, and its usefulness can be proved; y There are sufficient technical, financial resources and other resource support to complete the development of the intangible asset, and have the ability to

Use or sell the intangible asset; y The expenditure attributable to the development stage of the intangible asset can be reliably measured.

Specific criteria for dividing the research phase and development phase of internal research and development projects: the planned investigation phase for acquiring new technologies and knowledge, etc., should be

Determined as the research stage, which is characterized by planning and exploration; before commercial production or use, the research results or other knowledge are applied to a certain project

Planning or design to produce new or substantially improved materials, devices, products, etc. should be determined as the development stage, which is targeted and shaped

Higher likelihood of success.

31. Impairment of long-term assets

(1) Long-term equity investment, investment real estate measured by the cost model, fixed assets, construction in progress, productive biological resources measured by the cost model

Impairment testing methods and accounting treatment methods for long-term assets such as production, oil and gas assets, right-of-use assets, intangible assets, and goodwill:

y On the balance sheet date, whether there is any sign that the company may be impaired according to individual assets. If there is any sign of impairment, conduct an impairment test and estimate the assets

recoverable amount. If the recoverable amount of an asset is lower than its book value, the book value of the asset is reduced to the recoverable amount, and the reduced amount is recognized as asset impairment

The loss shall be included in the current profit and loss, and the corresponding asset impairment provision shall be withdrawn at the same time. After the asset impairment loss is confirmed, the depreciation or amortization expenses of the impaired asset shall be calculated in the future

The period is adjusted accordingly so that the adjusted book value of the asset (net of estimated net salvage value) is systematically apportioned over the remaining useful life of the asset. Once an asset impairment loss is confirmed, it cannot be reversed in subsequent accounting periods.

yIf there are any of the following signs, it indicates that the assets may be impaired:

A) The current market price of the asset has fallen sharply, and the decline is significantly higher than the expected decline due to the passage of time or normal use.

B) The economic, technological or legal environment in which the company operates and the market in which the assets are located have undergone major changes in the current period or will occur in the near future, thus affecting the company.

adverse impact on the company.

C) The market interest rate or other market return on investment has increased in the current period, thus affecting the company's discount rate for calculating the present value of the expected future cash flow of assets,

The recoverable amount of the asset is greatly reduced.

D) There is evidence that the asset is obsolete or physically damaged.

E) Assets have been or will be idled, terminated, or scheduled for early disposal.

F) Evidence from the company's internal reports that the economic performance of the asset has been or will be lower than expected, such as the net cash flow created by the asset or the realized revenue.

The profit (or loss) of the business is far lower (or higher) than the expected amount, etc.

G) Other indications that the asset may have been impaired.

(2) If there are indications that an asset may be impaired, the company shall estimate its recoverable amount on the basis of a single asset. It is difficult for the company to determine the value of a single asset

If the recoverable amount is estimated, the recoverable amount of the asset group shall be determined on the basis of the asset group to which the asset belongs.

The determination of an asset group is based on whether the main cash inflows generated by the asset group are independent of the cash inflows of other assets or asset groups. At the same time, in identifying

When organizing production groups, consider the way the company's management manages production and operation activities (such as by production line, business type, or region or region, etc.) and the management of assets.

The decision-making method for continued use or disposal, etc. Once the asset group is determined, it shall be consistent in each accounting period and shall not be changed arbitrarily.

(3) Goodwill and intangible assets with indefinite service life and rights and interests in unproven mining areas formed due to business combination, no matter whether there is any sign of impairment, will be recorded every year

An impairment test should be performed.

(4) After the asset impairment loss is confirmed, the depreciation or amortization expenses of the impaired asset shall be adjusted accordingly in the future, so that the asset will

Systematically apportion the adjusted book value of the asset (net of projected net salvage value) within the period.

32. Long-term deferred expenses

Long-term deferred expenses refer to various expenses that have been incurred by the company but should be shared by the current year and subsequent periods with an amortization period of more than one year (excluding one year), including

Expenditures for improvement of fixed assets rented in by way of operating lease, etc.

Long-term deferred expenses are recorded on the basis of actual expenditure and are amortized evenly during the benefit period of the project. If the long-term deferred expense items cannot benefit future accounting periods, they will be

The amortized value of the item that has not been amortized is fully transferred to the current profit and loss.

33. Contract liabilities

The company lists the obligation to transfer the goods to the customer that has received or receivable the customer's consideration as a contract liability, such as the company has received before transferring the promised goods payment.

The contract assets and contract liabilities under the same contract are presented in net amount, and if the net amount is the balance of the debit side, it shall be listed in "contract assets" or "other non-current assets" according to its liquidity.

If the net amount is the credit balance, it shall be listed in the item of "contract liabilities" or "other non-current liabilities" according to its liquidity.

34. Employee compensation

(1) Accounting treatment method for short-term compensation

The company recognizes the actual short-term remuneration as a liability during the accounting period provided by employees for the company, and includes it in the current profit and loss or the cost of related assets.

(2) Accounting treatment method for post-employment benefits

Post-employment benefits are divided into defined contribution plans and defined benefit plans.

γ During the accounting period when employees provide services to the company, the company will recognize the payable deposit amount calculated according to the defined deposit withdrawal plan as a liability, and include it in the current profit and loss or related asset costs.

γ The accounting treatment of defined benefit plans usually includes the following steps:

Δγ According to the expected cumulative welfare unit method, the unbiased and mutually consistent actuarial assumptions are used to estimate the relevant demographic variables and financial variables, etc.

Define the obligations arising from the benefit plan and determine the period to which the relevant obligations belong;

Βγ If there are assets in the defined benefit plan, the deficit or surplus formed by subtracting the fair value of the assets of the defined benefit plan from the present value of the defined benefit plan obligation shall be recognized

It is the net liabilities or net assets of a defined benefit plan. If there is a surplus in the defined benefit plan, it shall be measured at the lower of the surplus of the defined benefit plan and the upper limit of assets

Defined benefit plan net assets. The upper limit of assets refers to the economic benefits that the company can obtain from the refund of the defined benefit plan or the reduction of future contributions to the defined benefit plan present value;

Çγ At the end of the period, the employee compensation costs arising from the defined benefit plan are recognized as service costs, the net interest of the net liabilities or net assets of the defined benefit plan, and the recurring

Changes arising from newly measuring net liabilities or net assets of defined benefit plans, of which service costs and net interest on net liabilities or net assets of defined benefit plans are included in the current period

Profit and loss or related asset costs, changes arising from the remeasurement of net liabilities or net assets of defined benefit plans are included in other comprehensive income, and will not be included in subsequent accounting periods

Reversions to profit or loss are permitted, but these amounts recognized in OCI may be transferred within equity;

Δγ When the defined benefit plan is settled, a settlement gain or loss is confirmed.

(3) Accounting treatment method for dismissal benefits

If the company provides dismissal benefits to employees, the employee compensation liabilities arising from the dismissal benefits shall be recognized on the earlier of the following two dates and included in the current profit and loss: γ When the company cannot unilaterally withdraw the dismissal benefits provided due to the termination of labor relationship plans or layoff proposals; γThe company confirms the costs related to the restructuring involving the payment of dismissal benefits or When the fee.

(4) Accounting treatment methods for other long-term employee benefits

Other long-term benefits provided by the company to employees that meet the conditions of the defined withdrawal plan shall be accounted for in accordance with the defined withdrawal plan;

For long-term benefits, the accounting treatment shall be carried out according to the defined benefit plan, but the changes arising from the remeasurement of other long-term employee welfare net liabilities or net assets shall be included in the current profit and loss related asset costs.

35. Lease liabilities

(1) Recognition and initial measurement of lease liabilities

On the commencement date of the lease term, the Company recognizes lease liabilities for leases other than short-term leases and low-value asset leases. The lease payment refers to the company's payment to the lessor

Payments made by the owner in connection with the right to use the leased asset during the lease term, including:

γ For the fixed payment amount and the actual fixed payment amount, if there is a leasing incentive, the relevant amount of the leasing incentive shall be deducted;

γThe variable lease payment depends on the index or ratio, which is determined according to the index or ratio on the lease commencement date at the time of initial measurement;

γ The exercise price of the purchase option, provided that the company is reasonably certain that the option will be exercised;

γ Amounts payable for exercising the option to terminate the lease, provided that the lease term reflects that the company will exercise the option to terminate the lease;

γ The amount expected to be paid according to the residual value of the guarantee provided by the company.

(2) Subsequent measurement of lease liabilities

The company calculates the interest expense of the lease liability in each period of the lease period according to the fixed periodic interest rate, and includes it in the current profit and loss. According to the "Accounting Standards for Business Enterprises"

No. 17 - Borrowing Costs" and other standards stipulate that it should be included in the cost of relevant assets, so the provisions shall prevail.

36. Estimated liabilities

(1) Recognition standard for estimated liabilities

Contingencies related to external guarantees, pending litigation or arbitration, product quality assurance, layoff plans, loss-making contracts, restructuring obligations, fixed asset disposal obligations, etc.

When the related business meets the following conditions at the same time, it is recognized as a liability:

• This obligation is the current obligation undertaken by the company.

• The fulfillment of this obligation is likely to cause economic benefits to flow out of the enterprise.

• The amount of the obligation can be measured reliably.

(2) Measurement method of estimated liabilities

Estimated liabilities are initially measured based on the best estimate of the expenditure required to fulfill the current obligation. There is a continuous range of required expenditures, and the various results within this range

In other cases, the best estimate is determined as follows:

• When a contingency involves a single item, the best estimate is determined by the most likely amount.

• When contingencies involve multiple projects, the best estimate is determined based on various possible occurrence amounts and their occurrence probabilities.

If all or part of the expenses required by the company to pay off the estimated liabilities is expected to be compensated by a third party or other parties, the compensation amount will be recognized as an asset when it is basically confirmed that it can be received.

Confirm separately. The confirmed compensation amount shall not exceed the book value of the confirmed estimated liabilities.

The company reviews the book value of estimated liabilities on the balance sheet date. There is conclusive evidence that the book value cannot truly reflect the current best estimate. According to the current

The best estimate adjusts the book value.

37. Share payment

Share-based payment includes equity-settled share-based payment and cash-settled share-based payment. If the equity-settled share payment is exchanged for the service provided by the employee, the grant shall be

Fair value measurement of employee equity instruments. If there is an active market, it shall be determined according to the quotation in the active market; if there is no active market, it shall be determined by valuation techniques

including reference to prices used in recent market transactions between knowledgeable and voluntary parties, reference to current published prices for other financial instruments that are substantially the same

Fair value, discounted cash flow and option pricing models, etc.

On each balance sheet date, based on the latest follow-up information such as the change in the number of exercisable people and the completion of performance indicators, the number of stock options that are expected to be exercisable is

corrected, and the expenses that should be apportioned in each period are confirmed based on this. For option expenses spanning multiple accounting periods, generally, the options can be calculated according to the

The proportion of the length of the internal waiting period to the length of the entire waiting period shall be apportioned.

38. Preferred shares, perpetual bonds and other financial instruments

not applicable

39. Income

The company needs to comply with the disclosure requirements for "business related to the chemical industry" in the "Guidelines for Self-Regulatory Supervision of Listed Companies of Shenzhen Stock Exchange No. 3 - Industry Information Disclosure"

Accounting policies adopted for revenue recognition and measurement

1. General principles

The company recognizes revenue when the company has fulfilled the performance obligations in the contract, that is, when the customer obtains control of the relevant goods or services. Performance obligations refer to the contractual obligations of the company to

A promise that a customer transfers a distinct good or service. If the contract contains two or more performance obligations, the company shall, on the contract commencement date,

The relative proportion of the stand-alone selling price of the promised goods or services, the transaction price is allocated to each individual performance obligation, and the transaction price allocated to each individual performance obligation

Meter revenue. The transaction price is the amount of consideration that the company expects to be entitled to receive due to the transfer of goods or services to the customer, the amount collected by the company on behalf of a third party, and the company's pre-paid

The money that will be returned to the customer in the future will not be included in the transaction price. The transaction price confirmed by the company including the variable consideration shall not exceed the cumulative confirmed value when the relevant uncertainties are eliminated

Amounts recognized as income that are unlikely to materially reverse. If there is a significant financing component in the contract, the company assumes that when the customer obtains the right to control the goods or services

The amount payable in cash determines the transaction price. The difference between the transaction price and the consideration amount promised in the contract shall be amortized by the actual interest rate method within the contract period.

pin. On the inception date of the contract, if the company expects that the interval between the customer's acquisition of the goods or services and the customer's payment of the price is not more than one year, regardless of the significant financing in the contract capital components.

A company transfers control of an item to a customer, and this transfer may occur over a period of time or at a point in time. When one of the following conditions is met, it is

Performance obligations are performed within a certain period of time; otherwise, performance obligations are performed at a certain point in time:

- The customer obtains and consumes the economic benefits brought by the company's performance at the same time as the company's performance of the contract.
- The customer can control the goods under construction during the company's contract performance.
- The goods produced during the company's performance of the contract have irreplaceable uses, and the company has the right to charge for the performance part that has been completed so far during the entire contract period

payment.

For performance obligations that are fulfilled within a certain period of time, the company recognizes revenue according to the progress of the performance within that period of time. When the performance progress cannot be reasonably determined, the company has

If the incurred costs are expected to be compensated, the revenue shall be recognized according to the amount of the incurred costs until the performance progress can be reasonably determined.

For performance obligations fulfilled at a certain point in time, the company recognizes revenue at the point in time when the customer obtains control over the relevant goods or services. When judging whether the customer has obtained the product

The company will consider the following indicators when controlling the right to control the product or service: • The company has the current right to receive payment for the product or service, that is, the customer has a current payment obligation for the product service. • The company has transferred the legal ownership of the product to the customer, that is, the customer already owns the legal title of the product. • The company has transferred the goods in kind to

The customer, that is, the customer has physically taken possession of the commodity.

- The company has transferred the main risks and rewards of ownership of the commodity to the customer, that is, the customer has obtained the main risks and rewards of ownership of the commodity.
- The customer has accepted the product or service.
- Other signs indicating that the customer has obtained the right to control the product.

2. Specific method

The specific time point when the company confirms the

revenue • Environmental protection materials and chemical products, hydrocarbon-based biodiesel products are sold domestically, and the revenue is recognized when the goods are delivered and the receipt confirmation confirmed by the customer is obtained; the export sales

For sales, revenue is recognized when the goods are shipped and the customs export declaration form, bill of lading or receipt confirmation is obtained.

• Commodity purchase and sales business of energy industry comprehensive services (formerly trade value-added services), the company undertakes the procurement and sales of commodities during the transaction process of trade value-added services

Main risks, the right to independently select suppliers and customers according to market conditions, have the right to negotiate and price the goods sold, and confirm the price when delivering goods and obtaining the customer's settlement

recognized income.

- For the equipment sales in the energy industry comprehensive services (formerly fossil energy industry comprehensive services and ecological agriculture and green energy services), if the sales equipment needs to be installed
- For installation and inspection, before the purchaser accepts the goods and the installation and inspection are completed, the company cannot consider that the control of the goods has been transferred to the customer, and the company will
- Revenue is recognized when the product is accepted and accepted; if the installation procedure is relatively simple, the customer's acceptance is only a routine procedure and does not affect the company's judgment that the customer has obtained the product.
- At the time of controlling the product, the company recognizes the revenue when the company delivers the goods and obtains the receipt confirmation from the customer.
- Provision of patents and technology licenses and service revenue recognition in comprehensive services for the energy industry (formerly comprehensive services for the fossil energy industry and ecological agriculture and green energy services)

Timing: Confirm the income and issue an invoice when the technical list and service completion materials confirmed by the customer are obtained;

• The civil engineering installation in the energy industry comprehensive service (formerly fossil energy industry comprehensive service and ecological agriculture and green energy service) divides a project according to the image progress

When the construction progress reaches the node agreed in the contract, the completion acceptance of the project will be carried out, and the customer, construction company will be obtained

The income is recognized when the project completion acceptance report issued by the construction unit and the supervision unit;

• Oil and gas facilities manufacturing and comprehensive services are based on the nature of the project and refer to the proportion of the actual accumulated cost to the estimated total cost or the confirmed project volume to the estimated

Revenue is recognized in proportion to the total project volume.

40. Government subsidies

Government subsidy refers to the company's acquisition of monetary assets and non-monetary assets from the government for free, excluding the government as an investor and enjoying corresponding owner's rights and interests

and invested capital. Government grants are divided into asset-related government grants and income-related government grants. The company will use the obtained funds for purchase and construction or in other ways

Government subsidies that form long-term assets are defined as government subsidies related to assets; other government subsidies are defined as government subsidies related to income. If government documents are not

If the subsidy objects are clearly specified, the subsidy funds shall be divided into government subsidies related to income and government subsidies related to assets in the following ways: (1) government documents specify

If the specific project targeted by the subsidy is confirmed, it is determined according to the relative proportion of the expenditure amount that will form assets and the expenditure amount that will be included in the expense in the budget of the specific project.

division, the division ratio needs to be reviewed on each balance sheet date and changed if necessary;

If a specific project is specified, it is regarded as a government subsidy related to income. If the government subsidy is a monetary asset, it shall be measured at the amount received or receivable. Government subsidy is not

Monetary assets are measured at fair value; if the fair value cannot be reliably obtained, they are measured at nominal amount. Government grants measured at nominal amounts,

directly included in the current profit and loss.

The company usually recognizes and measures government subsidies according to the actual amount received when it is actually received. However, there is conclusive evidence at the end of the period that the financial

The relevant conditions stipulated in the support policy are expected to receive financial support funds, which will be measured according to the receivable amount. The government subsidy measured according to the receivable amount shall meet the

The following conditions: (1) The amount of the subsidy receivable has been confirmed by a document issued by the competent government department, or it can be determined according to the relevant provisions of the officially issued financial fund management measures

Reasonable calculation by itself, and it is estimated that there is no major uncertainty in the amount;

Financial support projects and financial fund management measures that shall be voluntarily disclosed in accordance with the provisions of the Regulations, and the management measures shall be inclusive (any meeting the specified conditions

All enterprises can apply), rather than specially formulated for specific enterprises; (3) The relevant subsidy approval documents have clearly promised the time limit for disbursement, and the disbursement of the fund

It is guaranteed by the corresponding financial budget, so it can be reasonably guaranteed that it can be received within the specified time limit; (4) According to the specific conditions of the company and the subsidy,

Other relevant conditions to be met (if any).

Government subsidies related to assets are recognized as deferred income, and are included in the current profit and loss in stages in a reasonable and systematic manner within the useful life of the relevant assets.

If the government subsidy related to income is used to compensate the related costs or losses in the subsequent period, it shall be recognized as deferred income.

If it is used to compensate for the related costs or losses that have already occurred, it shall be directly included in the current profit and loss.

The government subsidy that includes both the asset-related part and the income-related part will be accounted for separately; if it is difficult to distinguish, it will be treated as a whole

Classified as government grants related to income.

Government grants related to the company's daily activities are included in other income or offset related costs according to the nature of economic business; those not related to daily activities

Government grants are included in non-operating income and expenditure.

When the confirmed government subsidy needs to be returned, if there is a balance of relevant deferred income, the book balance of the relevant deferred income shall be offset, and the excess shall be included in the current profit and loss;

In other cases, it shall be directly included in the current profit and loss.

41. Deferred income tax assets/deferred income tax liabilities

(1) Temporary differences

Temporary differences include the difference between the book value of assets and liabilities and the tax basis, and those that are not recognized as assets and liabilities, but can be recognized in accordance with tax laws.

The difference between the book value of an item whose tax base is determined and the tax base. Temporary differences are divided into taxable temporary differences and deductible temporary differences.

(2) Basis for confirmation of deferred income tax assets

For the deductible temporary differences, deductible losses and tax credits that can be carried forward to future years, the company is likely to obtain deductible temporary differences

Deferred income tax assets arising therefrom are recognized to the extent of the future taxable income of differences, deductible losses and tax credits, unless the deductible temporary difference is

arising from the following transactions:

̣ The transaction is not a business combination, and the transaction affects neither accounting profit nor taxable income;

̣ For the deductible temporary difference related to the investment of subsidiaries, joint ventures and associates, if the following conditions are met at the same time, the corresponding deferred income shall be recognized

Tax assets: the temporary difference is likely to be reversed in the foreseeable future, and the taxable income that can be used to offset the deductible temporary difference is likely to be obtained in the future.

(3) Basis for confirmation of deferred income tax liabilities

All taxable temporary differences are recognized as deferred income tax liabilities, unless the taxable temporary differences arise in the following transactions:

̣ Initial recognition of goodwill, or initial recognition of assets or liabilities arising from a transaction with the following characteristics: the transaction is not a business

The time of birth does not affect the accounting profit nor the taxable income;

̣ For the taxable temporary difference related to the investment of subsidiaries, joint ventures and joint ventures, the timing of the reversal of the temporary difference can be controlled and the temporary difference

Temporal differences are likely not to reverse in the foreseeable future.

(4) Impairment of deferred income tax assets

On the balance sheet date, the book value of the deferred income tax assets shall be reviewed. If it is probable that sufficient taxable income will not be obtained in the future

To offset the benefits of deferred income tax assets, write down the book value of deferred income tax assets. Except for the deferred income tax assets included in the owner's equity at the time of original recognition

In addition to the owner's equity, the write-down amount should also be included in the current income tax expense. When it is probable that sufficient taxable income will be obtained,

The book value of deferred income tax assets written down can be restored.

42. Leasing

(1) Accounting treatment method for operating leases

Lease refers to a contract in which the Company assigns or acquires the right to control the use of one or more identified assets within a certain period in exchange for or payment of consideration. In a

On the commencement date of a contract, the Company assesses whether the contract is a lease or contains a lease.

(1) The company as lessee

Initial measurement

On the commencement date of the lease term, the Company recognizes the right to use the leased asset during the lease term as the right-of-use asset, and the present value of the unpaid lease payment

Recognized as a lease liability, except for short-term leases and leases of low-value assets. When calculating the present value of lease payments, the company uses the lease implicit interest rate as the discounted

If the interest rate implicit in the lease cannot be determined, the lessee's incremental borrowing rate shall be used as the discount rate.

Subsequent measurement

The company accrues depreciation for the right-of-use assets with reference to the relevant depreciation provisions of "Accounting Standards for Business Enterprises No. 4 - Fixed Assets", and can reasonably determine that the lease term expires

If the ownership of the leased asset is obtained at the time of acquisition, the company shall accrue depreciation within the remaining useful life of the leased asset. There is no reasonable certainty that the leased asset will be available at the end of the lease term

In case of ownership, the company shall accrue depreciation during the shorter period of the lease term or the remaining useful life of the leased asset.

For lease liabilities, the company calculates the interest expenses during each period of the lease period according to the fixed periodic interest rate, and includes it in the current profit and loss or related assets

cost. Variable lease payments that are not included in the measurement of lease liabilities are included in current profit or loss or related asset costs when they actually occur.

After the commencement date of the lease term, when the actual fixed payment changes, the estimated payable amount of the residual value of the guarantee changes, the index used to determine the lease payment or

When the ratio changes, the assessment results of the option to purchase, the option to renew the lease or the option to terminate the option change or the actual exercise of the option changes, the company will

The lease liability is remeasured based on the present value of the lease payments and the book value of the right-of-use asset is adjusted accordingly. The book value of the right-of-use asset has been written down to zero, but the lease liability

If further reduction is required, the company will include the remaining amount in the current profit and loss.

Short-term leasing and leasing of low-value assets

For short-term leases (leases with a lease term of no more than 12 months on the lease commencement date) and low-value asset leases, the Company adopts a simplified approach and does not recognize

Right-of-use assets and lease liabilities, while the lease payments are included in the cost of related assets or current lease payments on a straight-line basis or other systematic and reasonable methods during each period of the lease term.

period profit and loss.

(2) The company as the lessor

The Company classifies leases into finance leases and operating leases based on the nature of the transaction on the commencement date of the lease. Finance lease refers to the transfer and lease of assets in essence

A lease that involves substantially all the risks and rewards associated with ownership. Operating leases are leases other than finance leases.

Operating lease

The Company adopts the straight-line method to recognize the lease receipts of the operating lease as the rental income in each period of the lease term. Unrecognized lease receipts related to operating leases

The amount of variable lease payment is included in the current profit and loss when it actually occurs.

Financial lease

On the commencement date of the lease term, the Company recognizes the finance lease receivable and derecognizes the finance lease assets. Finance lease receivables are calculated as net lease investment (unassured)

The residual value and the unreceived lease receipts on the commencement date of the lease term are initially measured based on the sum of the present value discounted at the interest rate implicit in the lease, and are calculated on a fixed periodic basis

Interest rate calculation Recognize the interest income during the lease term. The variable lease payments obtained by the company that are not included in the measurement of the net lease investment are included in the current loss when they actually occur.

beneficial.

(2) Accounting treatment method of finance lease

Ditto.

43. Other important accounting policies and accounting estimates

none

44. Changes in important accounting policies and accounting estimates

(1) Changes in important accounting policies

Applicable Not applicable

Content and reasons for accounting policy	approval procedure	Remark
changes On December 30, 2021, the Ministry of Finance issued *About Issuing the Interpretation of Accounting Standards for Business Enterprises No. 15 No.> Notice (Cai Kuai [2021] No. 35) (hereinafter referred to as "Interpretation No. 15"), Interpretation No. 15 requires "accounting treatment for external sales of products or by-products produced by enterprises before their fixed assets reach the intended usable state or during the research and development process" from January 1,	This accounting policy change is a reasonable change made by the company in accordance with the relevant regulations and requirements of the Ministry of Finance, and does not need to be submitted to the board of directors and shareholders' meeting for review. According to the "Guidelines for the Standardized Operation of Companies Listed on the Growth Enterprise Market of the Shenzhen Stock Exchange", the company has disclosed the "Announcement on Changes in Accounting Policies" on the Juchao website on April 22, 2022.	See the table below for the impact of relevant presentation adjustments.
2022 implement. On November 30, 2022, the Ministry of Finance released *About Issuing the Interpretation of Accounting Standards for Business Enterprises No. 16 No.> Notice (Cai Kuai [2022] No. 31) (hereinafter referred to as "Interpretation No. 16"), which stipulates that "accounting treatment of deferred income tax related to assets and liabilities arising from a single transaction not applicable to initial recognition exemption" will be implemented from January 1, 2023, and "regarding issuer classification Accounting Treatment for Income Tax Effects of Dividends Related to Financial Instruments that Are Equity Instruments" and "Accounting Treatment for Enterprises Changing Cash-settled Share-based Payments to Equity-settled Share-based Payments" will come into effect on the date of announcement.	This accounting policy change is a reasonable change made by the company in accordance with the relevant regulations and requirements of the Ministry of Finance, and does not need to be submitted to the board of directors and shareholders' meeting for review. According to the relevant regulations of listed companies, the company has disclosed the "Announcement on Changes in Accounting Policies" on the Juchao website on April 7, 2023.	The aforementioned regulations had no material impact on the Company during the reporting period.

a. Impact on consolidated financial statements

Unit: Yuan

project	December 31, 2021 / 2021 (before change)	Impact amount	January 1, 2022/2021 (after change)
Undistributed	3,763,992,283.39	-2,748,319.53	3,761,243,963.86
profits of fixed assets	3,978,943,576.47	-1,511,575.74	3,977,432,000.73
attributable to owners' equity of the parent company	8,148,725,909.65	-1,511,575.74	8,147,214,333.91
Minority shareholders' equity	718,199,008.67	-1,236,743.79	716,962,264.88
Operating income	5,750,649,462.56	4,252,400.44	5,754,901,863.00
Operating costs	5,015,865,202.68	7,000,719.97	5,022,865,922.65
Net profit attributable to owners of the parent company	82,911,732.28	-1,511,575.74	81,400,156.54
Minority shareholders' profit	-25,652,717.04	-1,236,743.79	-26,889,460.83

and loss b. Impact on the financial statements of the parent company

From January 1, 2022, the company will implement the Interpretation No. 15 for the first time, and the parent company will not be involved in the adjustment of the opening balance of the balance sheet.

(2) Changes in important accounting estimates

ApplicableNot applicable

45. Others

none

6. Taxes

1. Main tax categories and tax rates

tax	Tax basis	tax rate
VAT	Domestic sales of goods, technical services, etc.	13%~9%~6%~5%~3%
Urban maintenance and construction tax	Turnover tax payable	1%~5%~7%
Corporate Income Tax	Circulation tax payable	15%~20%~25%
Educational Surcharge	for taxable income 70% of the	3%
Local Educational Surcharge	original value of the real estate	2%
property tax	for self-use is the tax basis, and the applicable tax rate is 1.2%; 12%	1.2%~12%
other taxes	Calculate and pay according to relevant regulations	

If there are taxpayers with different corporate income tax rates, the disclosure statement

Tax subject name	income tax rate
Our	15%
company Shenyang Sanju Kite Catalyst Co., Ltd.	15%
Wuhan Jinzhong Engineering Technology Co.,	15%
Ltd. Inner Mongolia Sanju Jiajing New Energy Co., Ltd.	15%
Daqing Sanju Energy Purification Co., Ltd. Inner	15%
Mongolia Meifang Coal Coking Co., Ltd. Beijing	15%
Huashi United Energy Technology Development Co., Ltd.	15%
Zhejiang Jujin Biomass Technology Co., Ltd.	20%
Hulunbuir Sanju Lvyuan Biomass New Material Co., Ltd. Kaifeng Sanju	20%
Lvyuan Biomass New Material Co., Ltd. Tongjiang Sanju Lvyuan	20%
Biomass New Material Co., Ltd. Xing'an League Sanju Lvyuan	20%
Biomass New Material Co., Ltd. Henan Sanju Lvyuan Biomass New	20%
Material Technology Co., Ltd. Jiuyan Sanju Lvyuan Biomass New Material	20%
Co., Ltd. Pingluo County Sanju Lvyuan Biomass New Material Co.,	20%
Ltd. Fuxin Sanju Lvyuan Biomass New Material Co., Ltd. Suzhou	20%
Sanju Luyuan Biomass New Material Co., Ltd. Bozhou Sanju Lvhui	20%
Biomass New Material Co., Ltd. Miayang Sanju Luyuan Biomass	20%
New Material Co., Ltd. Hainan Sanju Green Energy Research Institute	20%
Co., Ltd. Guangxi Sanju Bioenergy Co., Ltd. Others except the	20%
above Domestic taxpayer	20%
	20%
	25%

2. Tax incentives

(1) On July 31, 2020, the company obtained a joint agreement signed by the Beijing Municipal Science and Technology Commission, the Beijing Municipal Bureau of Finance, and the Beijing Municipal Taxation Bureau of the State Administration of Taxation.

The high-tech enterprise certificate issued by the company, certificate number GR202011001298, is valid for three years, and the applicable corporate income tax rate is 15%. According to the relevant regulations of the enterprise income tax law

According to the regulations, the first branch of the company and the headquarter of the company will pay corporate income tax together.

(2) On November 28, 2022, Shenyang Sanju Kate Catalyst Co., Ltd., a wholly-owned subsidiary of the Company, obtained the approval from Liaoning Provincial Department of Science and Technology and Liaoning Provincial Finance Department.

The high-tech enterprise certificate jointly issued by the Government Office and the Liaoning Provincial Taxation Bureau of the State Administration of Taxation, the certificate number: GR202221001580, is valid for three years, and the enterprise income

The applicable tax rate is 15%.

(3) On November 15, 2021, Wuhan Jinzhong Engineering Technology Co., Ltd., a subsidiary of the Company, was approved by the Hubei Provincial Department of Science and Technology, the Hubei Provincial Department of Finance,

The Hubei Provincial Taxation Bureau of the State Administration of Taxation jointly recognized it as a high-tech enterprise, the certificate number: GR202142001729, valid for three years, and the applicable corporate income tax rate

15%.

(4) On October 12, 2022, Daqing Sanju Energy Purification Co., Ltd., a subsidiary of the company, obtained the approval from Heilongjiang Science and Technology Department and Heilongjiang Province

The high-tech enterprise certificate jointly issued by the Department of Finance and the Heilongjiang Provincial Taxation Bureau of the State Administration of Taxation, the certificate number: GR202223000167, is valid for three years, and the enterprise

The applicable income tax rate is 15%.

(5) On September 16, 2021, Inner Mongolia Meifang Coal Coking Co., Ltd., a holding subsidiary of the Company, obtained the approval from the Science and Technology Department of Inner Mongolia Autonomous Region and Inner Mongolia

The high-tech enterprise certificate jointly issued by the Finance Department of the Autonomous Region and the Inner Mongolia Autonomous Region Taxation Bureau of the State Administration of Taxation, the certificate number: GR202115000017, and the validity period

For three years, the applicable corporate income tax rate is 15%.

(6) Inner Mongolia Sanju Jiajing New Energy Co., Ltd., a wholly-owned subsidiary of the company, has obtained the recognition of preferential taxation in the Western Development Strategy in 2020. According to the "Ministry of Finance,

The Circular of the General Administration of Customs and the State Administration of Taxation on In-depth Implementation of the Tax Policy Issues Related to the Western Development Strategy (Cai Shui [2011] No. 58), since

From 2020 onwards, the company will levy corporate income tax at a reduced tax rate of 15%.

(7) On December 1, 2022, Beijing Huashi United Energy Technology Development Co., Ltd., a subsidiary of the Company, obtained the approval from Beijing Science and Technology Commission,

The high-tech enterprise certificate jointly issued by the Beijing Municipal Bureau of Finance and the Beijing Municipal Taxation Bureau of the State Administration of Taxation, the certificate number: GR202211004823, is valid for three years,

The applicable corporate income tax rate is 15%.

(8) According to the announcement of the Ministry of Finance and the State Administration of Taxation of the People's Republic of China on the Exemption of Value-Added Tax for Small-scale Value-Added Taxpayers (Announcement 2022 No. 15

No.) and other documents, from April 1, 2022 to December 31, 2022, small-scale VAT taxpayers shall be exempted from taxable sales income at a levy rate of 3%.

Value-added tax; 3% pre-paid value-added tax items are applicable, and pre-paid value-added tax is suspended; according to the Ministry of Finance and the State Administration of Taxation of the People's Republic of China

Announcement of the Bureau on the Implementation of Income Tax Preferential Policies for Small and Micro Enterprises and Individual Industrial and Commercial Households (Announcement No. 12 of 2021), from January 1, 2021 to December 2022

On March 31, for small low-profit enterprises whose annual taxable income does not exceed 1 million yuan, the taxable income will be included in the taxable income at a reduced rate of 12.5%, and the enterprise tax rate will be 20%.

According to the Ministry of Finance and the State Administration of Taxation of the People's Republic of China, "The Ministry of Finance and the State Administration of Taxation on Further Implementing Income Tax Preferential Policies for Small and Micro Enterprises"

The Announcement (Announcement No. 13 of 2022) stipulates that from January 1, 2022 to December 31, 2024, the part of the annual taxable income of small and low-profit enterprises exceeding 1 million yuan but not exceeding 3 million yuan

shall be reduced. 25% is included in the taxable income, and the enterprise income tax is paid at a rate of 20%. The company's holding subsidiary Zhejiang

Jujin Biomass Technology Co., Ltd., Tongjiang Sanju Lvyuan Biomass New Material Co., Ltd., Hulunbeier Sanju Lvyuan Biomass New Material Co., Ltd., Xing'an League

Sanju Lvyuan Biomass New Material Co., Ltd., Henan Sanju Lvyuan Biomass New Material Technology Co., Ltd., Kaifeng Sanju Lvbao Biomass New Material Co., Ltd.

Jiyuan Sanju Lvyuan Biomass New Material Co., Ltd., Pingluo County Sanju Lvyuan Biomass New Material Co., Ltd., Fuxin Sanju Lvyuan Biomass New Material Co., Ltd.

Co., Ltd., Suzhou Sanju Lvyuan Biomass New Material Co., Ltd., Bozhou Sanju Lvhui Biomass New Material Co., Ltd., Mianyang Sanju Lvyuan Biomass New Material Co., Ltd., Hainan Sanju Green Energy Research Institute Co., Ltd., Guangxi Sanju

Bioenergy Co., Ltd. meets the standards of small low-profit enterprises.

(9) Inner Mongolia Sanju Jiajing New Energy Co., Ltd., a wholly-owned subsidiary of the company, according to Article 33 of the "Enterprise Income Tax Law of the People's Republic of China" and "Chinese

Article 99 of the Regulations on the Implementation of the Enterprise Income Tax Law of the People's Republic of China stipulates that the company takes the resources stipulated in the "Comprehensive Utilization of Resources Enterprise Income Tax Preferential Catalog" as the main resources.

For the main materials, the income obtained from the production of products that are not restricted or prohibited by the state and meet the relevant national and industry standards, shall be included in the total income at a reduced rate of 90%.

3. Others

The employee's personal income tax is withheld and paid by the company. Overseas companies pay corresponding taxes in accordance with relevant local tax policies.

7. Notes to items in the consolidated financial statements

1. Monetary funds

unit: yuan

project	Ending balance	Opening Balance
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cash in stock	29,454.40	49,674.79
Bank deposits	455,321,256.91	374,385,360.35
in other currencies	30,051,754.73	151,874,193.78
total	485,402,466.04	526,309,228.92
Including: total amount deposited overseas	54,535,241.72	32,669,139.53
The total amount of funds restricted for use due to mortgage, pledge or freezing	41,411,819.61	179,628,724.18

other instructions:

(1) As of December 31, 2022, the company's monetary funds with restricted use rights are RMB 41,411,819.61, of which: frozen funds RMB 23,784,136.20; bank acceptance deposit of RMB 17,127,683.41; guarantee deposit of RMB 500,000.00.

(2) As of December 31, 2022, the company's monetary funds deposited overseas are RMB 54,535,241.72.

2. Trading financial assets

unit: yuan

project	Ending balance	Opening Balance
in:		
in:		

other instructions:

3. Derivative financial assets

unit: yuan

project	Ending balance	Opening Balance
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other instructions:

4. Notes receivable

(1) List of notes receivable by category

unit: yuan

project	Ending balance	Opening Balance
bank acceptance note	121,343,990.95	87,276,813.10
Commercial Promissory Note	20,784,774.97	1,008,708.38
total	142,128,765.92	88,285,521.48

unit: yuan

category	Ending balance					Opening Balance				
	Book balance		Bad debt provision		Book value	Book balance		Bad debt provision		Book value
	Amount	Proportion	Amount	Accrual ratio		Amount	Proportion	Amount	Accrual ratio	
in:										

in:										
-----	--	--	--	--	--	--	--	--	--	--

If the bad debt provision for bills receivable is accrued according to the general model of expected credit losses, please refer to the disclosure method of other receivables to disclose the relevant information of bad debt provision:

ýApplicableýNot applicable

(2) Provision for bad debts accrued, recovered or reversed in the current period

Provision for bad debts in this period:

unit: yuan

category	Opening Balance	Amount of change in the current period				Ending balance
		Provision	withdraw or transfer back	write off	other	

Among them, the recoverable or reversed amount of bad debt provision in the current period is important:

ýApplicableýNot applicable

(3) Notes receivable pledged by the company at the end of the period

unit: yuan

project	Amount pledged at the end of the period
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(4) Bills receivable that have been endorsed or discounted by the company at the end of the period and have not yet expired on the balance sheet date

unit: yuan

project	Amount derecognized at the end of the period	Amount not derecognized at the end of the period
bank acceptance note	911,694,848.54	
Total commercial	15,110,124.80	
acceptance notes	926,804,973.34	

(5) At the end of the period, the company transferred the bills to accounts receivable due to the issuer's failure to perform the contract

unit: yuan

project	Amount transferred to accounts receivable at the end of the period
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other instructions:

(6) Bills receivable actually written off in the current period

unit: yuan

project	Write-off amount
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Important write-offs of notes receivable:

unit: yuan

company name	Nature of notes receivable	Write-off amount	Write-off procedures for write-off reasons	Whether the payment is generated by related transactions
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Notes receivable write-off instructions:

5. Accounts receivable

(1) Accounts receivable classification disclosure

unit: yuan

category	Ending balance					Opening Balance				
	Book balance		Bad debt provision		Book value	Book balance		Bad debt provision		Book value
	Amount	Proportion	Amount	Accrual ratio		Amount	Proportion	Amount	Accrual ratio	
Accounts receivable with single-item provision	524,022,336.23	19.05%	513,658,440.23	98.02%	10,363,896.00	524,554,131.10	22.04%	512,031,932.72	97.61%	12,522,198.38
for bad debts Among them:										
Accounts receivable with insignificant single	515,112,301.87	18.73%	504,748,405.87	97.99%	10,363,896.00	515,484,096.74	21.66%	502,961,898.36	97.57%	12,522,198.38
amount but provision for bad debts individually	8,910,034.36	0.32%	8,910,034.36	100.00%		9,070,034.36	0.38%	9,070,034.36	100.00%	
Accounts receivable for which provision for bad debts is made on a group basis	2,226,279,274.77	80.95%	802,325,339.25	36.04%	1,423,953,935.52	1,855,575,129.38	77.96%	619,294,732.74	33.37%	1,236,280,396.64
Accounts receivable of which:										
Accounts receivable for which bad debt provision is withdrawn according to the combination of credit risk characteristics	2,226,279,274.77	80.95%	802,325,339.25	36.04%	1,423,953,935.52	1,855,575,129.38	77.96%	619,294,732.74	33.37%	1,236,280,396.64
total	2,750,301,611.00	100.00%	1,315,983,779.48	47.85%	1,434,317,831.52	2,380,129,260.48	100.00%	1,131,326,665.46	47.53%	1,248,802,595.02

Provision for bad debts by single item: 513,658,440.23 yuan

unit: yuan

name	Ending balance
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	Book balance	Bad debt provision	Accrual ratio	Provision reason
Accounts receivable with significant single amount and provision for bad debts	515,112,301.87	504,748,405.87	97.99%	Part of the amount is expected to be irrecoverable
individually. Accounts receivable with insignificant single amount but provision for bad debts	8,910,034.36	8,910,034.36	100.00%	expected to be uncollectible
	524,022,336.23	513,658,440.23		

individually shall be provisioned for bad debts individually:

unit: yuan

name	Ending balance			
	Book balance	Bad debt provision	Accrual ratio	Provision reason

accrues bad debt provision according to combination: 802,325,339.25 yuan

unit: yuan

name	Ending balance		
	Book balance	Bad debt provision	Accrual ratio
Total accounts receivable for which bad debt provision is withdrawn according to the combination of credit risk	2,226,279,274.77	802,325,339.25	36.04%
characteristics	2,226,279,274.77	802,325,339.25	

Instructions for determining what this combination is based on:

Accounts receivable with provision for bad debts according to the combination of credit risk characteristics:

unit: yuan

aging	Ending balance		
	Book balance	Bad debt provision	Accrual ratio
Within 1 year (including 1 year)	814,283,830.79	40,714,191.56	5.00%
1 to 2 years	264,025,116.85	26,402,511.69	10.00%
2 to 3 years	163,298,477.73	48,989,543.32	30.00%
3 to 4 years	262,786,337.22	131,393,168.61	50.00%
4 to 5 years	334,119,176.23	167,059,588.12	50.00%
5+ years	387,766,335.95	387,766,335.95	100.00%
total	2,226,279,274.77	802,325,339.25	

If the bad debt provision for accounts receivable is accrued according to the general model of expected credit losses, please refer to the disclosure method of other receivables to disclose the relevant information of bad debt provision:

ýApplicableýNot applicable

Disclosure by age

unit: yuan

aging	Book balance
Within 1 year (including 1 year)	814,283,830.79
1 to 2 years	264,025,116.85
2 to 3 years	165,287,771.25
3+ years	1,506,704,892.11
3 to 4 years	346,564,080.47

4 to 5 years	676,603,108.43
Total over 5	483,537,703.21
years	2,750,301,611.00

(2) Provision for bad debts accrued, recovered or reversed in the current period

Provision for bad debts in this period:

unit: yuan

category	Opening Balance	Amount of change in the current period				Ending balance
		Provision	withdraw or transfer back	write off	other	
Provision for bad debts of accounts receivable	1,131,326.66 5.46	184,657,114. 02				1,315,983,77 9.48
total	1,131,326.66 5.46	184,657,114. 02				1,315,983,77 9.48

Among them, the recoverable or reversed amount of bad debt provision in the current period is important:

unit: yuan

company name	Amount withdrawn or reversed	Recovery method
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(3) Accounts receivable actually written off in the current period

unit: yuan

project	Write-off amount
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Important write-off of accounts receivable:

unit: yuan

company name	Nature of accounts receivable	Write-off amount	Write-off procedures for	write-off reasons	Whether the payment is generated by related transactions
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Accounts receivable write-off instructions:

(4) Accounts receivable of the top five ending balances collected by debtors

unit: yuan

company name	Closing balance of accounts receivable	Proportion to the total ending balance of accounts receivable	Closing balance of provision for bad debts
Inner Mongolia Jushi Energy Co., Ltd.	422,748,789.91	15.37%	86,360,179.81
Jingmen Yingde Gas Co., Ltd.	269,979,606.83	9.82%	269,979,606.83
TRAFIGURA PTE LTD Jiangsu	238,107,591.33	8.66%	11,905,379.57
Heyou Chemical Co., Ltd. Ningxia	156,073,442.95	5.67%	121,725,962.95
Ronghua Biomass New Material Technology Co., Ltd. Total	130,585,268.59	4.75%	65,292,634.30
	1,217,494,699.61	44.27%	

(5) Accounts receivable derecognized due to transfer of financial assets

none

(6) The amount of assets and liabilities formed by the transfer of accounts receivable and continued involvement

none

other instructions:

none

6. Accounts receivable financing

unit: yuan

project	Ending balance	Opening Balance
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Changes in increase and decrease of receivables financing in the current period and changes in fair value

ÿApplicableÿNot applicable

If the account receivable financing impairment provision is made according to the general model of expected credit losses, please refer to the disclosure method of other receivables to disclose the relevant information of the impairment provision:

ÿApplicableÿNot applicable

other instructions:

7. Prepayment

(1) Prepayments are listed by aging

unit: yuan

aging	Ending balance		Opening Balance	
	the amount	Proportion	the amount	Proportion
Within 1 year	350,350,185.60	26.97%	490,945,094.73	35.06%
1 to 2 years	89,560,747.95	6.89%	264,601,457.77	18.89%
2 to 3 years	244,268,378.25	18.80%	389,605,383.45	27.82%
Total over 3	615,135,086.52	47.34%	255,252,929.40	18.23%
years	1,299,314,398.32		1,400,404,865.35	

Explanation on the reasons why the prepayments with an age of more than 1 year and an important amount were not settled in time:

company name	Relationship with the company	Amount aged over 1 year	aging	Unpaid Reason
Taizhou Ruifeng Environmental Protection Technology Co., Ltd.	unrelated party	138,350,273.08 2-3 years	3-4 years	Purchase settlement procedures for prepayments have not been completed
Fushun Machinery Manufacturing Co., Ltd.	unrelated party	Purchase settlement procedures for more than 5 years have not been completed	2-3 years, 3-4 years, 4-5 years Advance payments have not been completed	115,112,378.00 Purchase settlement
Dalian Haowei Petrochemical Co., Ltd.	unrelated party	98,942,019.44	3-4 years	procedures for advance payments have not been completed Purchase
Inner Mongolia Meifang Xize Supply Chain Management Co., Ltd.	unrelated party	70,300,000.00	1-2 years	settlement procedures have not been completed formalities

Lanzhou Lanshi Heavy Equipment Co., Ltd.	unrelated party	66,982,170.00	3-4 years	The advance payment has not yet completed the purchase settlement procedures
total		489,686,840.52		

The year-end balance of prepayments aged over one year totaled 948,964,212.72 yuan, accounting for 73.03% of the total prepayments at the end of the period.

(2) Prepayments of the top five ending balances classified by prepayment objects

company name	Ending balance of relationship with the company		Proportion to the total ending balance of prepayments (%)	Prepayment time
Taizhou Rulfeng Environmental Protection Technology Co., Ltd.	unrelated party	140,614,369.31	10.82	Within 1 year, 2-3 years, 3-4 years 2-3 years,
Fushun Machinery Manufacturing Co., Ltd.	unrelated party	115,112,378.00	8.86	3-4 years, 4-5 years, over 5 years 3-4 years Within 1
Dalian Haowei Petrochemical Co., Ltd.	unrelated party	98,942,019.44	7.61	year, 2-3
Shandong Baoshun Chemical Technology Co.,	unrelated party	89,216,665.93	6.87	years, 3-4 years
Ltd. Inner Mongolia Meifang Xize Supply Chain Management Co., Ltd.	unrelated party	70,300,000.00	5.41	1-2 years
total		514,185,432.68	39.57	

other instructions:

The total amount of the top five prepayments collected by the company at the end of the year according to the prepayment objects this year is 514,185,432.68 yuan, accounting for the proportion of the total balance of prepayments at the end of the year Example is 39.57%.

8. Other receivables

unit: yuan

project	Ending balance	Opening Balance
other receivables	471,532,262.45	449,534,124.09
total	471,532,262.45	449,534,124.09

(1) Interest receivable

1) Classification of interest receivable

unit: yuan

project	Ending balance	Opening Balance
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2) Important overdue interest

unit: yuan

Borrower	Ending balance	overdue time	Overdue reason	Whether there is impairment and its judgment basis
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other instructions:

3) Provision for bad debts

ýApplicableýNot applicable

(2) Dividends receivable

1) Classification of dividends receivable

unit: yuan

Project (or invested unit)	Ending balance	Opening Balance
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2) Important dividends receivable with an aging of more than 1 year

unit: yuan

Project (or invested unit)	Ending balance	aging	Reason for non-recovery	Whether there is impairment and its judgment basis
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3) Provision for bad debts

¥Applicable¥Not applicable

other instructions:

none

(3) Other receivables

1) Classification of other receivables according to the nature of the receivables

unit: yuan

Nature of payment	Closing book balance	Opening book balance
Security deposits, internal reserve funds and	101,174,389.06	49,146,543.81
other funds and other	556,891,712.87	532,352,409.03
sums	658,066,101.93	581,498,952.84

2) Provision for bad debts

unit: yuan

Bad debt provision	The first stage	second stage	The third phase	total
	Expected credit losses in the next 12 months	Expected credit losses throughout the duration (no credit impairment occurred)	Lifetime expected credit loss (credit impairment has occurred)	
January 1, 2022 balance	37,817,950.48		94,146,878.27	131,964,828.75
January 1, 2022 balance in current period				
Accrual for this period	17,852,936.98		36,716,073.75	54,569,010.73
December 31, 2022 balance	55,670,887.46		130,862,952.02	186,533,839.48

Changes in the book balance of loss provisions with significant changes in the current period

¥Applicable¥Not applicable

Disclosure by age

unit: yuan

aging	Book balance
Within 1 year (including 1	87,968,836.67
year) 1 to 2 years	378,506,705.19
2 to 3 years	106,100,363.66
over 3 years	85,490,196.41
3 to 4 years	15,643,314.18
4 to 5 years	49,633,041.45
5+ years	20,213,840.78
total	658,066,101.93

3) Provision for bad debts accrued, recovered or reversed in the current period

Provision for bad debts in this period:

unit: yuan

category	Opening Balance	Amount of change in the current period				Ending balance
		Provision	withdraw or transfer back	write off	other	
Provision for bad debts	131,964,828.	54,569,010.7				186,533,839.
of other receivables	75	3				48
total	131,964,828.	54,569,010.7 3				186,533,839. 48
	75					

Among them, the amount of bad debt provision reversed or recovered in the current period is important:

unit: yuan

company name	Reversed or withdrawn amount	Recovery method
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4) Other receivables actually written off in the current period

unit: yuan

Write-	Write-off amount
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off of important other receivables in the project:

unit: yuan

Unit name	Nature of other receivables	Write-off amount	Write-off procedures for	write-off reasons	Whether the payment is generated by related transactions
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Instructions for write-off of other receivables:

5) Other receivables of the top five ending balances collected by debtors

unit: yuan

company name	nature of payment	Ending balance	aging	Proportion to the total ending balance of other receivables	Closing balance of provision for bad debts
Xiaoyi City Jingze Garden can	exchange money	179,206,756.24	Within 1 year, 1-2 years	27.23%	17,520,924.58

Source Co., Ltd.					
Beijing Jingzeyuan Energy Co., Ltd. Hebei	current account	124,419,777.80	Within 1 year, 1-2 years	18.91%	12,049,323.96
Xinquan Petrochemical Co., Ltd. Beijing	current account	59,337,510.24	Within 1 year, 2-3 years	9.02%	29,546,574.79
Yize Sunshine Industrial Co., Ltd. Morin	Equity payment	47,223,119.77	Within 1 year, 1-2 years	7.18%	4,222,311.98
Dawa Daur Autonomous Banner Xingda Rice Industry Co., Ltd. Total	Cooperative business suspension payment	41,047,883.00	4-5 years	6.24%	20,523,941.50
		451,235,047.05		68.58%	83,863,076.81

Note: 1 Xiaoyi Jingzeyuan Energy Co., Ltd. (formerly Xiaoyi Sanju Pengfei New Energy Co., Ltd.), Beijing Jingzeyuan Energy Co., Ltd. (formerly Beijing Sanju Energy Co., Ltd.

Co., Ltd.) was originally a wholly-owned subsidiary of the company. In 2021, the company listed to transfer the equity of the above two companies.

6) Accounts receivable involving government subsidies

unit: yuan

company name	Government subsidy project name	Ending balance	Ending aging	Estimated collection time, amount and basis
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7) Other receivables derecognized due to transfer of financial assets

none

8) The amount of assets and liabilities formed by transferring other receivables and continuing to be involved

other instructions:

none

9. Inventory

Does the company need to comply with the disclosure requirements of the real estate industry?

no

(1) Inventory classification

unit: yuan

project	Ending balance			Opening Balance		
	Book balance	Provision for inventory decline or contract performance cost impairment provision	Book value Book balance		Provision for inventory decline or contract performance cost impairment provision	Book value
raw materials	635,275,782.42	31,070,068.56	604,205,713.86	567,712,504.74	16,410,882.33	551,301,622.41
in product	35,850,053.86		35,850,053.86	32,058,436.60		32,058,436.60
Inventory	1,127,769,739.99	628,545.91	1,028,141,196.80	655,431.14	107,303,241.33	573,352,190.81

	9.33	1	3.42	90	27	63
Purification project	911,906,523. 31		911,906,523. 31	586,062,317. 13		586,062,317. 13
Consigned processing materials				10,297,831.4		10,297,831.4
				3		3
total	2,710,802,09	130,698,614.	2,580,103,48	1,876,786,52	123,714,123.	1,753,072,39
	8.92	47	4.45	1.80	60	8.20

(2) Provision for inventory decline and contract performance cost impairment provision

unit: yuan

project	Opening Balance	The increase in the current		The decrease in the current		Ending balance
		period is accrued for other		period is reversed or written off to	other	
raw materials	16,410,882.3	28,013,470.8		13,354,284.6		31,070,068.5
	3	7		4		6
Inventory	107,303,241.	15,784,567.4		23,459,262.7		99,628,545.9
	27	0		6		1
total	123,714,123. 60	43,798,038.2 7		36,813,547.4 0		130,698,614. 47

Basis for accrual of inventory depreciation reserve and reasons for reversal or write-off in this year

Specific basis for accruing inventory depreciation reserves for projects	Reasons for the reversal of the reserve for inventory decline in value this year	Reasons for writing off the provision for inventory decline in value this year
Raw	The net realizable value at the end of the period is lower than the book value	Inventories with provision for inventory decline in value realized external sales in the current
material inventory	The net realizable value at the end of the period is lower than the book value	period Inventories with provision for inventory decline in value realized in the current period

(3) Explanation that the ending balance of inventories includes the capitalized amount of borrowing costs

none

(4) Explanation on the amortization amount of the contract performance cost in the current period

none

10. Contract assets

unit: yuan

project	Ending balance			Opening Balance		
	Book value of provision for impairment of book balance	Book value of provision for impairment of book balance	Book value of provision for impairment of book balance			
Contract assets with insignificant single amount but for which provision for impairment is made individually	1,684,000.00 1,684,000.00			4,834,000.00 4,834,000.00		
Contract assets for which provision for impairment is made based on the combination of credit risk characteristics	337,189,231. 07	82,917,950.0 6	254,271,281. 01	305,153,467. 62	27,971,140.9 3	277,182,326. 69
total	338,873,231. 07	84,601,950.0 6	254,271,281. 01	309,987,467. 62	32,805,140.9 3	277,182,326. 69

The amount and reasons for significant changes in the book value of contract assets during the current period:

unit: yuan

project	Amount of change	Reason for change
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If the bad debt provision for contract assets is accrued according to the general model of expected credit losses, please refer to the disclosure method of other receivables to disclose the relevant information of bad debt provision:

Applicable/Not applicable

Provision for impairment of contract assets in the current period:

unit: yuan

Contract	Accrual for this period	Transfer back in this period	Write-off/write-off in current period	reason
assets with insignificant individual amounts but with individual provision for depreciation Total contract	-3,150,000.00			Provision for impairment based on expected credit losses
assets for which depreciation provision is withdrawn based on combination of credit risk	54,946,809.13			Provision for impairment based on expected credit losses
characteristics	51,796,809.13			-

other instructions:

none

11. Assets held for sale

unit: yuan

Book balance	impairment provision at the end of the period	Book value at the end of the period	Fair value	Estimated disposal costs	Estimated disposal time
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other instructions:

none

12. Non-current assets due within one year

unit: yuan

Long-term	Ending balance	Opening Balance
term receivables due within one year Total	7,000,000.00	6,475,296.37
trust protection funds due within one year	2,500,000.00	2,500,000.00
	9,500,000.00	8,975,296.37

Important Debt Investments/Other Debt Investments

unit: yuan

Debt project	Ending balance				Opening Balance			
	Par Value	Coupon Rate	Effective Rate	Maturity Date	Par Value	Coupon Rate	Effective Rate	Maturity Date

other instructions:

13. Other current assets

unit: yuan

project	Ending balance	Opening Balance
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Other total amount of	22,067,628.81	12,988,147.69
input tax prepaid	1,086,677.23	15,107,030.07
income tax	26,303,091.32 201,009.57	84,889,327.20 167,678.33
credit		
to be certified	49,658,406.93	113,152,183.29

other instructions:

14. Debt investment

unit: yuan

project	Ending balance			Opening Balance		
	Book value of provision for impairment of book balance			Book value of provision for impairment of book balance		

important debt investment

unit: yuan

Debt project	Ending balance			Opening Balance		
	Par value, coupon rate, actual interest rate, maturity date, par value, coupon rate, actual interest rate, maturity date, provision for impairment					

unit: yuan

Bad debt provision	The first stage	second stage	The third phase	total
	Expected credit losses in the next 12 months	Expected credit losses throughout the duration (no credit impairment occurred)	Lifetime expected credit loss (credit impairment has occurred)	
January 1, 2022 balance in current period				

Changes in the book balance of loss provisions with significant changes in the current period

ApplicableNot applicable

other instructions:

15. Other debt investments

unit: yuan

Accrued interest on the opening balance of the project	Changes in fair value for the period	Closing Balance Cost	Cumulative fair value changes	Accumulated loss allowance recognized in other comprehensive income	Remark
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Important other debt investments

unit: yuan

Other debt items	Ending balance			Opening Balance		
	Par value, coupon rate, actual interest rate, maturity date, par value, coupon rate, actual interest rate, maturity date, provision for impairment					

Unit: Yuan Total

Bad debt provision	The first stage	second stage	The third phase
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	Expected credit losses in the next 12 months	Expected credit losses throughout the duration (no credit impairment occurred)	Lifetime expected credit loss (credit impairment has occurred)	
January 1, 2022 balance in current period				

Changes in the book balance of loss provisions with significant changes in the current period

ÿApplicableÿNot applicable

other instructions:

16. Long-term receivables

(1) Long-term receivables

unit: yuan

project	Ending balance			Opening Balance			Discount rate range
	Book balance	Book value of provision for bad debts	Book value of provision for bad debts	Book balance	Book value of provision for bad debts	Book value of provision for bad debts	
Finance lease payment	55,029,040 .75		55,029,040 .75	6,475,296. 37		6,475,296. 37	
Including: Unrealized financing income	7,245,959. 25		7,245,959. 25	524,703.63		524,703.63	
minus: long-term receivables due within one year	7,000,000. 00		7,000,000. 00	6,475,296. 37		6,475,296. 37	
total	48,029,040 .75		48,029,040 .75				

Impairment of bad debt provision

unit: yuan

Bad debt provision	The first stage	second stage	The third phase	total
	Expected credit losses in the next 12 months	Expected credit losses throughout the duration (no credit impairment occurred)	Lifetime expected credit loss (credit impairment has occurred)	
January 1, 2022 balance in current period				

Changes in the book balance of loss provisions with significant changes in the current period

ÿApplicableÿNot applicable

(2) Long-term receivables derecognized due to transfer of financial assets

none

(3) The amount of assets and liabilities formed by the transfer of long-term receivables and continued involvement

none

other instructions:

none

17. Long-term equity investment

unit: yuan

Invested unit	Opening balance (book value)	Changes in current period								Ending balance (book value)	Closing balance of provision for impairment
		additional investment	reduce investment	Investment gains and losses recognized under the equity method	Adjustments to other comprehensive income	Other equity changes	Declare a cash dividend or profit	Provision for impairment	other		
1. Joint venture											
2. Joint venture Beijing											
Sanju Yujin Technology Development Co., Ltd. Jutal	57,976,283.79			506,812.43						57,469,471.36	
Offshore Oil Service Co., Ltd. Inner	689,328,368.20			75,561,519.20	9,638,496.20				4,045,703.11	619,359,642.09	
Mongolia Jushi Energy Co.,	362,569,802.45			1,949,394.39					360,620,408.06		
Ltd. Inner Mongolia Jiajing Magnesium Industry Co., Ltd.	423,714,526.04			39,735,390.46						383,979,135.58	
Subtotal	1,533,588,980.48			117,753,116.48	9,638,496.20				364,666,111.17	1,060,808,249.03	
total	1,533,588,980.48			117,753,116.48	9,638,496.20				364,666,111.17	1,060,808,249.03	

other instructions:

1. Other changes of Jutal's increase or decrease are the foreign currency translation differences arising from the conversion of the company's wholly-owned subsidiary Sanju Hong Kong's long-term equity investment from the bookkeeping currency Hong Kong dollar to RMB on the balance sheet date, and Jutal's allotment of new shares and the actions of minority shareholders. It is caused by the changes caused by the passive dilution of equity.

2. Other changes in Jushi Energy include that at the end of March 2022, the director of Meifang Coking, a holding subsidiary of the company, will no longer serve as the general manager of Jushi Energy, and will no longer be a member of the company.

Significant impact, due to the reclassification of long-term equity investment as other non-current financial assets.

18. Investment in other equity instruments

unit: yuan

project	Ending balance	Opening Balance
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Itemized disclosure of non-trading equity instrument investments for the current period

unit: yuan

project name	Recognized Dividend Income	Cumulative Gain	Cumulative Loss	Amount transferred from other comprehensive income to retained earnings	Reasons for designation as measured at fair value through other comprehensive income	Reasons for transferring other comprehensive income to retained earnings
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other instructions:

19. Other non-current financial assets

unit: yuan

Project	Ending balance	Opening Balance
Beijing Zhongguancun M&A Fund of Funds Investment Center (Limited Partnership) National Trust · Jinfuhui No. 2 Bailout Project Collective Service	7,011,056.19	15,476,733.93
Trust Plan Fuda Zijin Hydrogen Energy Technology Co., Ltd. Inner Mongolia Jushi Energy	2,201,002,503.56	2,201,002,503.56
Co., Ltd. Total	13,330,000.00	
	360,620,408.06	
	2,581,963,967.81	2,216,479,237.49

other instructions:

During the reporting period, the company invested RMB 13.33 million in Fuda Zijin Hydrogen Energy Technology Co., Ltd. with a patented technology, holding 5% of the shares.

Financial assets that are measured at value and whose changes are included in current profit and loss are reclassified to other non-current financial assets on the balance sheet date.

20. Investment real estate

(1) Investment real estate adopting the cost measurement model

ApplicableNot applicable

(2) Investment real estate adopting the fair value measurement model

ApplicableNot applicable

(3) Investment real estate without title certificate

unit: yuan

project	Book value	Reasons for not completing the certificate of title
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other instructions:

21. Fixed assets

unit: yuan

project	Ending balance	Opening Balance
fixed assets	3,440,929,326.79	3,761,243,963.86
total	3,440,929,326.79	3,761,243,963.86

(1) Fixed assets

unit: yuan

project	building	mechanical equipment	Transportation equipment	Office equipment and others	total
1. Original book value:					
1. Opening balance	1,859,549,283.33	3,781,186,019.39	55,536,072.56	45,069,210.25	5,741,340,585.53
2. Increased gold in this period	320,067,436.25	120,957,777.68	1,360,058.24	1,509,065.51	443,894,337.68
(1) Purchase		80,891,597.54	1,360,058.24	1,509,065.51	83,760,721.29
(2) Transfer of construction in progress	3,053,329.99	40,066,180.14			43,119,510.13
(3) Enterprise merge increase					
(4) Others 3.	317,014,106.26				317,014,106.26
Reduction of funds in the current period	722,299.98	340,165,788.72	1,376,806.00	317,459.17	342,582,353.87
(1) Disposal or scrapped		21,084,096.42	1,376,806.00	317,459.17	22,778,361.59
(2) Other	722,299.98	319,081,692.30			319,803,992.28
4. Closing balance	2,178,894,419.60	3,561,978,008.35	55,519,324.80	46,260,816.59	5,842,652,569.34
2. Accumulated depreciation					
1. Beginning balance	539,139,958.78	1,358,154,064.51	45,982,703.52	36,819,894.86	1,980,096,621.67
2. Increased gold in this period	115,800,753.64	337,205,698.42	5,197,699.90	2,939,915.69	461,144,067.65
(1) Accrual (2)	96,745,697.95	337,205,698.42	5,197,699.90	2,939,915.69	442,089,011.96
Others 3.	19,055,055.69				19,055,055.69
Reduction in current period		37,918,403.66	1,307,965.70	291,077.41	39,517,446.77
(1) dispose of or scrapped		18,863,347.97	1,307,965.70	291,077.41	20,462,391.08
(2) Other		19,055,055.69			19,055,055.69
4. Ending balance	654,940,712.42	1,657,441,359.27	49,872,437.72	39,468,733.14	2,401,723,242.55
3. Provision for impairment					
1. Opening balance					
2. Increased gold in this period					
(1) Accrual 3.					
Decrease in current period					
(1) Disposal or scrapping					
4. Closing balance					
4. Book value					
1. Book price at the end of the period	1,523,953,707.18	1,904,536,649.08	5,646,887.08	6,792,083.45	3,440,929,326.79
2. Book price at the beginning of the period	1,320,409,324.2	2,423,031,954.8	9,553,369.04	8,249,315.39	3,761,243,963.8

value	55	8			6
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Note: 1 Other changes in increase or decrease are the changes in the amount and category of fixed assets due to the completion and final accounts of fixed assets of the company's holding subsidiaries Meifang Coking and Shandong Sanju during the reporting period.

move.

(2) Temporarily idle fixed assets

unit: yuan

project	original book value	accumulated depreciation	Provision for impairment	Book value	Remark
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(3) Fixed assets leased out through operating leases

unit: yuan

project	Ending book value
Total house building	29,495,505.72 24,818.67
transportation	29,520,324.39
equipment	

(4) Fixed assets without title certificates

unit: yuan

project	Book value	Reasons for not completing the property
building	right certificate 148,235,336.01	In the process of formalities

other instructions:

(5) Liquidation of fixed assets

unit: yuan

project	Ending balance	Opening Balance
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other instructions:

22. Construction in progress

unit: yuan

project	Ending balance	Opening Balance
Construction in progress	72,934,469.99	82,664,830.02
total	72,934,469.99	82,664,830.02

(1) Construction in progress

unit: yuan

project	Ending balance			Opening Balance		
	Book value of provision for impairment of book balance	Book value of provision for impairment of book balance	Book value of provision for impairment of book balance			
LNG central control room relocation project	4,941,871.85		4,941,871.85			

Refined oil depot project	25,513,441.2 5		25,513,441.2 5	25,513,441.2 5		25,513,441.2 5
Fuxin Sanju Lvyuan 10,000-ton Straw Biomass Comprehensive Recycling Project	360,130.50		360,130.50	360,130.50		360,130.50
Bozhou Sanju Lvhui 10,000-ton Straw Biomass Comprehensive Recycling Project	25,688,164.4 6		25,688,164.4 6	23,429,022.6 5		23,429,022.6 5
Pingluo County Sanju Lvyuan 10,000-ton Straw Biomass Comprehensive Recycling Project 1	415,688.62		415,688.62	415,688.62		415,688.62
million tons Advanced bio-liquid	660,179.84		660,179.84	660,179.84		660,179.84
fuel project 400,000 tons/year Bioenergy project system				30,844,739.8 6		30,844,739.8 6
supporting public works 400,000 tons/ year	5,780,696.86		5,780,696.86			
Bioenergy project technical transformation 400,000 tons/year Bioenergy project raw material pretreatment optimization	9,574,296.61		9,574,296.61			
Complete installation project of SIS system and instrument valve				1,441,627.30		1,441,627.30
total	72,934,469.9 9		72,934,469.9 9	82,664,830.0 2		82,664,830.0 2

(2) Changes in important construction-in-progress projects in the current period

unit: yuan

project name	Budget	Opening Balance	Amount of increase in this period	Amount transferred to fixed assets in the current period	Other decrease in current period	Ending balance	Proportion of cumulative project investment to budget	project progress	Accumulated amount of interest capitalized current period	Or which: Interest capitalized amount current period	Current interest capitalization rate	Sources of funds
LNG central control room	13,87 5,026 .90		4,941 ,871. 85			4,941 ,871. 85	36.49 %	36.00 %				other
	217,7 29,98 9.26	25,51 3,441 .25				25,51 3,441 .25	11.14 %	10.00 %				other
relocation project Refined oil depot project Fuxin Sanju Lvyuan 10,000-ton straw	87,89 1,759 .39	360,1 30.50				360,1 30.50	0.41% 1.00%					other

Biomass												
	96,90 4,950 .73	23,42 9,022 .65	2,259 ,141. 81			25,68 8,164 .46	26.61 %	61.00 %				other
	86,87 3,833 .82	415,6 88.62				415,6 88.62	0.48%	3.00%				other
	44,03 6,697 .25	30,84 4,739 .86	10,04 2,198 .24	40,88 6,938 .10			92.91 %	100.0 0%	2,404 ,785. 50	1,801 ,638. 83	5.02% Others	
	20,57 8,062 .84		5,780 ,696. 86			5,780 ,696. 86	28.09 %	28.00 %				other
	31,67 1,214 .58		9,574 ,296. 61			9,574 ,296. 61	31.58 %	28.00 %				other
Comprehensive Recycling Project Bozhou Sanju Lvhui 10,000-ton Straw Biomass Comprehensive Recycling Project Pingluo County Sanju Lv yuan 10,000-ton Straw Biomass Comprehensive Recycling Project 400,000 tons/year Bioenergy Project Sys												
total	599,5 61,53 4.77	80,56 3,022 .88	32,59 8,205 .37	40,88 6,938 .10		72,27 4,290 .15			2,404 ,785. 50	1,801 ,638. 83		

(3) Provision for impairment of construction in progress in the current period

unit: yuan

project	Amount accrued in the current period	Reason for accrual
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other instructions:

(4) Engineering materials

unit: yuan

project	Ending balance			Opening Balance	
	Book value of provision for impairment of book balance	Book value of provision for impairment of book balance	Book value of provision for impairment of book balance		

other instructions:

23. Productive biological assets

(1) Productive biological assets adopting the cost measurement model

ApplicableNot applicable

(2) Productive biological assets adopting the fair value measurement model

ApplicableNot applicable

24. Oil and gas assets

ApplicableNot applicable

25. Right-of-use assets

unit: yuan

project	equipment	total
1. Original book value:		
1. Opening balance	70,179,826.74	70,179,826.74
2. Increased amount in the current	17,219,146.16	17,219,146.16
period (1) New	17,219,146.16	17,219,146.16
increase 3. Decreased amount in the current period		
4. Closing balance	87,398,972.90	87,398,972.90
2. Accumulated depreciation		
1. Opening balance	435,781.85	435,781.85
2. Increased amount in this period	5,917,333.28	5,917,333.28
(1) Accrual	5,917,333.28	5,917,333.28
3. Decrease in current		
period (1) Disposal		

4. Closing balance	6,353,115.13	6,353,115.13
3. Provision for impairment		
1. Opening balance		
2. Increased amount in this period		
(1) Accrual		
3. Decrease in current period		
(1) Disposal		
4. Closing balance		
4. Book value		
1. Book value at the end of the period 2.	81,045,857.77	81,045,857.77
Book value at the beginning of the period	69,744,044.89	69,744,044.89

other instructions:

26. Intangible assets

(1) Intangible assets

unit: yuan

project	Land use rights	patent	Unpatented technology	other	total
1. Original book value:					
1. Beginning balance	270,386,288.13	442,534,380.61	45,134,392.24	65,597,934.68	823,652,995.66
Increased amount in this period		32,667,220.03		42,507,760.39	75,174,980.42
(1) buy place				2,591,723.96	2,591,723.96
(2) inside R & D		32,667,220.03		39,916,036.43	72,583,256.46
(3) Increase in business mergers					
3. Decrease in current period					
(1) place					
4. Ending balance	270,386,288.13	475,201,600.64	45,134,392.24	108,105,695.07	898,827,976.08
2. Accumulated amortization					
1. Opening balance	34,069,563.72	179,311,115.19	6,838,123.90	23,166,535.07	243,385,337.88
2. Increased amount in this period	6,971,754.53	40,853,299.70	4,031,387.76	4,034,360.67	55,890,802.66
(1) meter carry	6,971,754.53	40,853,299.70	4,031,387.76	4,034,360.67	55,890,802.66
3. Decrease in current period					
(1) place					

4. Ending balance	41,041,318.25	220,164,414.89	10,869,511.66	27,200,895.74	299,276,140.54
3. Provision for impairment					
1. Opening balance					
2. Increased amount in this period		1,750,000.00			1,750,000.00
(1) meter carry		1,750,000.00			1,750,000.00
3. Decrease in current period					
(1) place place					
4. Closing balance		1,750,000.00			1,750,000.00
4. Book value					
1. Book value at the end of the period	229,344,969.88	253,287,185.75	34,264,880.58	80,904,799.33	597,801,835.54
2. Book value at the beginning of the period	236,316,724.41	263,223,265.42	38,296,268.34	42,431,399.61	580,267,657.78

At the end of the period, intangible assets formed through the company's internal research and development accounted for 46.51% of the balance of intangible assets.

(2) Situation of land use rights without title certificates

unit: yuan

Project	The reason why the book value has not completed the certificate of title 10,302,962.33 In the process of	
Tongjiang Economic Development Zone	handling the formalities	
Land on the west side of Xing'an League Volkswagen Motor Vehicle Testing	4,522,829.30 In process of formalities	
Center Land in Xiaomoding Village, Nierji Town, Hulunbeier Mo Banner Land	6,624,556.97 In process of procedures	
in Wuhai City Wuda Industrial Park The total amount of coking land in	15,917,064.03 In process of procedures	
the United States	37,367,412.63	

other instructions:

none

27. Development expenditure

unit: yuan

project	Opening Balance	Amount of increase in this period			The decrease in the current period is			Ending balance
	Opening Balance	internal development expenditure	other		recognized as intangible assets	transferred to the current profit and loss		Ending balance
Development and promotion of series catalysts for synthesis gas	1,886,792.40					1,886,792.40		
to fine chemicals Development and application of low-cost	14,856,90 3.35							14,856,90 3.35
fertilizer series catalysts Biomass (straw)	106,801,279.21	4,661,951.83						111,463,231.04

Development of direct liquefaction technology and industrial demonstration project								
Development of a new type of diesel hydrogenation	7,310,246 .79							7,310,246 .79
catalyst and its application								
Reforming aromatics to generate oil	11,423,28							11,423,28
Refining catalyst	3.85							3.85
development and industrial sideline test Kilo-ton biomass gasification green	28,791,92	3,875,297			32,667,22			
	2.08	.95			0.03			
chemical technology development	5,945,663							5,945,663
Mercury-free fine chemical	.35							.35
catalyst Development and application of dehydrogenation	5,734,436 .86							5,734,436 .86
catalysts								
Development and application of high-efficiency and	11,122,52							11,122,52
	5.60							5.60
environment-friendly zinc oxide desulfurizer	511,275.2	7,161,854						7,673,129
Development and application of coke	7	.42						.69
oven gas to synthetic natural gas methanation catalysts	0.00	499,363.1						499,363.1
Development		6						6
and application of high-efficiency thermochemical	0.00	6,667,333 .30						6,667,333 .30
ammonia synthesis catalysts and their scale-up preparation technology	0.00	39,916,03			39,916,03			
Raw oil pretreatment process Research on intelligent coal blending technology for optimization projects		6.43			6.43			
total	194,384,3	62,781,83			72,583,25	1,886,792		182,696,1
	28.76	7.09			6.46	.40		16.99

other instructions:

none

28. Goodwill

(1) Original book value of goodwill

unit: yuan

The name of the invested unit or matters forming goodwill	Opening Balance	increase in this period		Decrease in this period		Ending balance
		formed by a business combination		deal with		
Suzhou Hengsheng New Material Co.,	4,809,209.67					4,809,209.67
Ltd. Wuhan Jinzhong Engineering Technology	34,542,059.98					34,542,059.98
Co., Ltd. Dalian Wudalian Petrochemical	2,510,385.64					2,510,385.64
Co., Ltd. Beijing Huashi United Energy Technology	7,233,888.59					7,233,888.59
Development Co., Ltd. Sichuan Xinda New	501,420.38					501,420.38
Energy Technology Co., Ltd. Shandong	55,499.84					55,499.84
Sanju Bioenergy Co., Ltd. Inner Mongolia Meifang Coking Co., Ltd. company	25,249,923.85					25,249,923.85
total	74,902,387.95					74,902,387.95

(2) Goodwill impairment provision

unit: yuan

The name of the invested unit or matters forming goodwill	Opening Balance	increase in this period		Decrease in this period		Ending balance
		Provision		deal with		
Dalian Wudalian Oil & Petrochemical Co., Ltd.	2,510,385.64					2,510,385.64
Beijing Huashi United Energy Technology Development	7,233,888.59					7,233,888.59
Co., Ltd. Sichuan Xinda New Energy Technology Co., Ltd.	501,420.38					501,420.38
total	10,245,694.61					10,245,694.61

Information about the asset group or combination of asset groups where the goodwill is located

none

Explain the goodwill impairment test process, key parameters (such as the growth rate in the forecast period, the growth rate in the stable period, profit rate, discount rate, forecast period, etc.) and the confirmation method of goodwill impairment loss when estimating the present value of future cash flows :

none

Impact of goodwill impairment testing

none

other instructions:

The company hired Zhongwei Zhengxin (Beijing) Assets Appraisal Co., Ltd., a professional appraisal agency, to evaluate the above-mentioned Suzhou Hengsheng New Materials Co., Ltd. Company, Shandong Sanju Bio-Energy Co., Ltd., and Inner Mongolia Meifang Coal Coking Co., Ltd. conducted impairment tests and issued evaluation reports respectively.

impairment occurs.

29. Long-term deferred expenses

unit: yuan

Project	Balance at the beginning of the period	Increased amount in the current period	Amortized amount in the current period	Other decreased amounts	Ending balance
equipment filler	9,257,836.13	17,108,158.68	12,385,247.37		13,980,747.44
decoration	6,852,018.36	3,243,364.17	3,141,971.40		6,953,411.13
cost rental	57,066.68		4,513.20		52,553.48
fee	1,452,078.66	1,178,869.56	1,109,058.84		1,521,889.38
other total	17,618,999.83	21,530,392.41	16,640,790.81		22,508,601.43

other instructions:

30. Deferred income tax assets/deferred income tax liabilities

(1) Deferred income tax assets without offset

unit: yuan

project	Ending balance		Opening Balance	
	Deductible temporary difference	deferred income tax assets	Deductible temporary differences	deferred income tax assets
Impairment of assets	869,649,541.68	130,985,182.90	742,414,293.89	112,734,941.58
Deductible losses	787,408,793.96	131,255,285.32	648,645,152.92	112,217,288.24
included in profit or loss by installments Tax-paid government grants	33,420,902.36	5,013,135.35	34,135,664.24	5,120,349.64
Business combinations not under common control Total asset	195,305,964.98	29,309,949.68	195,336,490.64	29,316,166.00
assessment impairment	1,885,785,202.98	296,563,553.25	1,620,531,601.69	259,388,745.46

(2) Deferred income tax liabilities not offset

unit: yuan

project	Ending balance		Opening Balance	
	Taxable Temporary Differences	Deferred Income Tax Liabilities	Taxable Temporary Differences	Deferred income Tax Liabilities
Total value-added of asset evaluation for business combinations not	222,337,646.68	33,353,899.33	253,282,709.81	38,002,166.44
under common control	222,337,646.68	33,353,899.33	253,282,709.81	38,002,166.44

(3) Deferred income tax assets or liabilities presented in net amount after offset

unit: yuan

project	Deferred income tax assets and deferred income tax assets after negative offset	Deferred income tax assets and deferred income tax assets after negative offset
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	Ending Balance of Debt Offset	Assets or Liabilities Ending Balance of	Debt Offset Assets or Liabilities Beginning Balance
Deferred tax assets		296,563,553.25	259,388,745.46
Deferred tax liabilities		33,353,899.33	38,002,166.44

(4) Details of unrecognized deferred income tax assets

unit: yuan

project	Ending balance	Opening Balance
Deductible temporary differences	828,666,418.37	694,838,628.90
against deductible losses	1,877,493,531.09	1,367,399,829.31
total	2,706,159,949.46	2,062,238,458.21

(5) The deductible loss of unrecognized deferred income tax assets will expire in the following year

unit: yuan

years	Ending amount	Beginning amount	Remark
2022 2023		6,139,469.37	
2024 2025	28,027,911.49	28,194,235.70	
2026 2027	189,750,674.57	186,525,190.29	
Total	339,174,746.93	342,773,022.71	
	805,381,301.68	803,767,911.24	
	515,158,896.42		
	1,877,493,531.09	1,367,399,829.31	

other instructions:

31. Other non-current assets

unit: yuan

project	Ending balance			Opening Balance		
	Book value of provision	for impairment of book balance	Book value of provision	for impairment of book balance		
Prepayments for long-term asset purchases	99,518,665.89		99,518,665.89	31,384,028.09		31,384,028.09
Cooperative operation				90,000,000.00		90,000,000.00
total	99,518,665.89		99,518,665.89	121,384,028.09		121,384,028.09

other instructions:

32. Short-term loans

(1) Classification of short-term loans

unit: yuan

project	Ending balance	Opening Balance
credit guaranteed	421,274,458.69	198,276,200.83

Total credit	50,000,000.00	
loan guarantee, pledge, mortgage	210,339,650.00	169,906,178.60
loan	681,614,108.69	368,182,379.43

Explanation of the classification of short-term loans:

(2) Short-term loans that have been overdue but not repaid

The total amount of overdue short-term loans at the end of the period is RMB, among which the important overdue short-term loans are as follows:

unit: yuan

Borrower	Ending balance	borrowing rate	overdue time	overdue interest rate
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other instructions:

none

33. Trading financial liabilities

none

34. Derivative financial liabilities

unit: yuan

project	Ending balance	Opening Balance
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other instructions:

35. Notes payable

unit: yuan

type	Ending balance	Opening Balance
trade acceptance draft		38,500,000.00
Total Bank Acceptance	42,227,683.41	112,730,928.72
Bill Letters		2,490,000.00
of Credit	42,227,683.41	153,720,928.72

At the end of the period, the total amount of bills payable that have expired but not paid is RMB 0.00.

36. Accounts payable

(1) List of accounts payable

unit: yuan

project	Ending balance	Opening Balance
Total payment for goods	1,684,701,200.21	1,656,813,985.44
and project	1,684,701,200.21	1,656,813,985.44

(2) Important accounts payable with aging over 1 year

unit: yuan

Project	Ending balance	Reason for nonpayment or carryover
Xi'an Shaangu Power Co., Ltd. Shuangliang	119,763,430.13 Not settled	23,703,918.93
Energy Saving System Co., Ltd. China Chemical	Not settled	18,432,291.89 Not settled
Engineering Thirteenth Construction Co., Ltd. China	17,624,651.15 Not settled	16,120,000.00
Construction Installation Group Co.,	Not settled	
Ltd. Dalian Institute of Chemical Physics, Chinese		
Academy of Sciences Total	195,644,292.10	

other instructions:

37. Advance payment

(1) List of advance receipts

unit: yuan

project	Ending balance	Opening Balance
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(2) Important advance receipts aged over 1 year

unit: yuan

project	Ending balance	Reason for nonpayment or carryover
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38. Contract liabilities

unit: yuan

The total	Ending balance	Opening Balance
amount of advance receipts received from the items transferred	603,694,611.84	326,602,054.48
by the project	603,694,611.84	326,602,054.48

The amount and reasons for significant changes in book value during the reporting period

unit: yuan

project	Amount of change	The reason for the
Advance payment received for the transfer of goods	277,092,557.36	change is mainly due to the increase in advance receipts received from Sanju Hong Kong, a wholly-owned subsidiary of the company, and Meifang Coking, a holding subsidiary of the company, for the transfer of goods.
total	277,092,557.36	—

39. Salaries payable to employees

(1) List of employee salaries payable

unit: yuan

project	Opening Balance	increase in this period	Decrease in this period	Ending balance
1. Short-term salary	7,998,500.99	380,792,956.61	379,014,024.66	9,777,432.94
2. Post-employment benefits - defined contribution plan		35,817,779.61	35,096,542.97	721,236.64

3. Dismissal benefits		1,997,248.48	1,997,248.48	
total	7,998,500.99	418,607,984.70	416,107,816.11	10,498,669.58

(2) List of short-term remuneration

unit: yuan

project	Opening Balance	increase in this period	Decrease in this period	Ending balance
1. Wages, bonuses, allowances and subsidies	7,838,685.83	317,530,223.35	316,443,270.97	8,925,638.21
2. Employee benefits		18,754,587.37	18,754,587.37	
3. Social insurance premiums	10,657.64	21,058,691.31	20,598,589.57	470,759.38
Of which: medical insurance fee	10,657.64	19,513,119.17	19,088,203.57	435,573.24
Injury insurance fee		1,545,572.14	1,510,386.00	35,186.14
4. Housing provident fund		17,086,384.40	16,863,514.40	222,870.00
5. Trade union funds and employee education funds	149,157.52	6,363,070.18	6,354,062.35	158,165.35
total	7,998,500.99	380,792,956.61	379,014,024.66	9,777,432.94

(3) Listing of set withdrawal plans

unit: yuan

Item	Opening Balance	increase in this period	Decrease in this period	Ending balance
1. Basic endowment insurance		34,673,855.61	33,972,454.97	701,400.64
2. Unemployment insurance premium		1,143,924.00	1,124,088.00	19,836.00
total		35,817,779.61	35,096,542.97	721,236.64

other instructions:

40. Taxes payable

unit: yuan

project	Ending balance	Opening Balance
VAT	4,547,452.77	17,974,615.68
corporate income tax	673,988.24	2,161,061.64
Personal Income Tax	433,230.81	389,648.11
City maintenance and	223,549.46	1,257,922.51
construction	1,002,484.05	930,174.27
tax Property tax	1,475,901.81	1,214,130.65
Land use tax	96,201.92	430,928.28
Education surcharge	64,134.62	287,285.53
Local	2,498,034.88	2,634,880.39
education surcharge Other total	11,014,978.56	27,280,647.06

other instructions:

41. Other payables

unit: yuan

project	Ending balance	Opening Balance
Other payables	2,202,275,827.45	1,654,775,036.34
total	2,202,275,827.45	1,654,775,036.34

(1) Interest payable

unit: yuan

project	Ending balance	Opening Balance
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Important overdue interest information:

unit: yuan

Borrower	overdue amount	Overdue reason
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other instructions:

(2) Dividends payable

unit: yuan

project	Ending balance	Opening Balance
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Other instructions, including significant dividend payables that have not been paid for more than 1 year, should disclose the reason for non-payment:

(3) Other payables

1) List other payables by nature of payment

unit: yuan

Total	Ending balance	Opening Balance
deposits, deposits, etc.	1,870,159,048.15	1,303,114,855.01
	319,990,682.56	327,422,418.69
	6,856,122.10	20,496,855.22
	5,269,974.64	3,740,907.42
	2,202,275,827.45	1,654,775,036.34

2) Important other payables aged over 1 year

unit: yuan

Item	Ending balance	Reason for nonpayment or carryover
Beijing Haidian District State-owned Assets Investment and	815,513,273.09 unsettled	
Operation Co., Ltd. Juxian Jinmao Asset	126,796,963.84 unsettled	
Management Co., Ltd. Total	942,310,236.93	

other instructions:

42. Liabilities held for sale

unit: yuan

project	Ending balance	Opening Balance
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other instructions:

43. Non-current liabilities due within one year

unit: yuan

project	Ending balance	Opening Balance
Long-term loans due within one year	572,389,272.52	363,077,534.23
Long-term payables due within one year	613,346,973.06	110,864,057.96
Lease liabilities due within one year	22,980,099.87	14,459,250.03
total	1,208,716,345.45	488,400,842.22

other instructions:

44. Other current liabilities

unit: yuan

Total	Ending balance	Opening Balance
tax and surcharges of items to be	340,501,704.72	396,288,691.11
written off	340,501,704.72	396,288,691.11

Increases and decreases in short-term bonds payable:

unit: yuan

bond name	face value	issue date	bond term	Issue amount	Opening Balance	Issued in this issue	Accrual of interest on face value	Amortization of premium and discount	current repayment		Ending balance
total											

other instructions:

45. Long-term loans

(1) Classification of long-term loans

unit: yuan

project	Ending balance	Opening Balance
credit guaranteed	250,760,069.44	250,942,650.53

Guaranteed, pledged and mortgaged	784,475,553.42	714,971,163.38
loans minus: total long-term loans due within one	572,389,272.52	363,077,534.23
year	462,846,350.34	602,836,279.68

Explanation of the classification of long-term loans:

Additional instructions, including interest rate bands:

46. Bonds payable

(1) Bonds payable

unit: yuan

project	Ending balance	Opening Balance
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(2) Increases and decreases in bonds payable (excluding other financial instruments such as preferred shares and perpetual bonds classified as financial liabilities)

unit: yuan

bond name	face value	issue date	bond term	Issue amount	Opening Balance	Issued in this issue	Accrual of interest on face value	Amortization of premium and discount	current repayment		Ending balance
total											

(3) Description of conversion conditions and conversion time of convertible corporate bonds

(4) Description of other financial instruments classified as financial liabilities

Basic information on preferred shares, perpetual bonds and other financial instruments issued at the end of the period

Table of changes in financial instruments such as preferred shares and perpetual bonds issued at the end of the period

unit: yuan

outstanding financial instruments	Beginning		increase in this period		Decrease in this period		end of term	
	Quantity	Book Value	Quantity	Book Value	Quantity	Book Value	Quantity	Book Value

Explanation of the basis for the classification of other financial instruments into financial liabilities

other instructions:

47. Lease liabilities

unit: yuan

project	Ending balance	Opening Balance
Lease liabilities	64,029,231.44	62,628,324.24
less: Total lease liabilities due within one year	22,980,099.87	14,459,250.03
	41,049,131.57	48,169,074.21

other instructions:

48. Long-term payables

unit: yuan

project	Ending balance	Opening Balance
Long-term payables	325,401,142.38	62,549,728.48
total	325,401,142.38	62,549,728.48

(1) List long-term payables according to the nature of the payment

unit: yuan

Project	Ending balance	Opening Balance
Chongqing Yuyu Financial Leasing Co., Ltd. Lease payment of	34,948,127.32	69,451,943.92
Great Wall Guoxing Financial Leasing Co., Ltd. Lease payment of Hubei Province Financial Leasing Co., Ltd.	658,659,405.13	
	39,284,560.83	75,041,230.52
Lease payment of Huaxu International Financial Leasing Co., Ltd. Lease payment of China Railway	32,948,749.65	28,920,612.00
	172,907,272.51	
Construction Financial Leasing Co., Ltd. Total	613,346,973.06	110,864,057.96
long-term payables due	325,401,142.38	62,549,728.48

other instructions:

(2) Special payables

unit: yuan

project	Opening Balance	increase in this period	Decrease in this period	Ending balance	Cause
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other instructions:

49. Long-term salary payable to employees

(1) Long-term salary payable to employees

unit: yuan

project	Ending balance	Opening Balance
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(2) Changes in the defined benefit plan

The present value of defined benefit plan obligations:

unit: yuan

project	Amount incurred in the current period	Amount incurred in the previous period
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Program Assets:

unit: yuan

project	Amount incurred in the current period	Amount incurred in the previous period
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Net liabilities (net assets) of defined benefit plans

unit: yuan

project	Amount incurred in the current period	Amount incurred in the previous period
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Description of the content of the defined benefit plan and its related risks, impact on the company's future cash flow, time and uncertainty:

Explanation of major actuarial assumptions and sensitivity analysis results of the defined benefit plan:

other instructions:

50. Estimated liabilities

unit: yuan

project	Ending balance	Opening Balance	Pending
pending litigation	8,394,612.80	1,908,715.24	litigation-related expenses expected to be paid for cause
total	8,394,612.80	1,908,715.24	

Other explanations, including relevant important assumptions and estimation explanations of important estimated liabilities:

51. Deferred income

unit: yuan

project	Opening Balance	increase in this period	Decrease in this period	Ending balance	Cause
Total government	69,434,420.78	1,008,000.00	5,356,448.60	65,085,972.18	Received government subsidies
subsidies	69,434,420.78	1,008,000.00	5,356,448.60	65,085,972.18	

Projects involving government subsidies:

unit: yuan

Opening balance of liability items	The new subsidy amount in this period	Amount included in non-operating income in the current period	Amount included in other income in the current period	Amount of offsetting costs and expenses in the current period	Closing balance of	other changes	Asset-Related/ Revenue-Related
Enterprise infrastructure supporting subsidy	1,148,006.91		349,213.49			798,793.42	related to assets
funds Shenyang City Industrial Development Fund	1,916,941.84		263,776.27			1,653,165.57	related to assets
Subsidy Fund Shenyang City Finance Bureau 2017 Emerging Industry Development Specialist	1,432,432.45		286,486.48			1,145,945.97	related to assets

Funds for								
infrastructure								
construction	29,638,283.04			823,285.64			28,814,997.40	related to assets
New construction, expansion, and renovation funds		1,008,000.00					1,008,000.00	related to assets
Renewable energy								
electrolytic hydrogen production - key	4,949,285.88			1,522,857.12			3,426,428.76	related to assets
technology and application projects for low-temperature and low-pressure ammonia	81,125.00			81,125.00				related to assets
synthesis								
Fixed asset loan interest discounts and	7,254,453.00			329,748.00			6,924,705.00	related to assets
investment subsidies - Subsidy	1,663,535.28			464,242.44			1,199,292.84	related to assets
funds for the production								
of desulfurization complete sets of equipment	10,990,357.35			115,714.20			10,874,643.15	related to assets
No. 2017								
Science and Technology Project	277,500.00			30,000.00			247,500.00	related to assets
Sichuan Provincial	462,499.97			50,000.04			412,499.93	related to assets
Science and Technology Planning	582,750.00			63,000.00			519,750.00	related to assets
Project								
Sichuan Provincial	1,748,250.00			189,000.00			1,559,250.00	related to assets
Directed Financial Transfer Payment								
Project 2015 Provincial Technical Transformation				528,000.00				
Project Annual Output				154,884,000				
							4,356,000	related to assets

1 ton of methoxydimethyl ether project	.00			0			.00 off	
special subsidy Sichuan action and innovation	2,312,500 .03			249,999.9 6			2,062,500 .07	related to assets
drive fund project 2016 key science and technology plan project funds	92,500.03			9,999.96			82,500.07	related to assets
total	69,434,420.78	1,008,000.00		5,356,448.60			65,085,972.18	

other instructions:

52. Other non-current liabilities

unit: yuan

project	Ending balance	Opening Balance
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other instructions:

53. Share capital

unit: yuan

	Opening Balance	Increase or decrease in this change (+, -)					Ending balance
		Issuance of new shares, bonus shares, transfer of public reserve to shares, etc.				Subtotal	
total number of shares	2,349,720,302.00						2,349,720,302.00

other instructions:

54. Other equity instruments

(1) Basic information on preferred shares, perpetual bonds and other financial instruments issued at the end of the period

Approved by the China Securities Regulatory Commission's Zhengjian Xuke [2018] No. 1963, the company issued a public offering to qualified investors on April 30, 2019.

3,330,000 renewable corporate bonds (first tranche), the issue price is RMB 100 each, the coupon rate is 7%, and the total issuance amount is RMB

333,000,000.00 yuan. The abbreviation of the bond is "19 Sanju Y1", and the bond code is "112899". The company has completed the payment of interest and delisted in May 2022.

(2) Changes in preferred shares, perpetual bonds and other financial instruments issued at the end of the period

unit: yuan

outstanding financial instruments	Beginning		increase in this period		Decrease in this period		end of term	
	Quantity	Book Value	Quantity	Book Value	Quantity	Book Value	Quantity	Book Value

Renewable bond 19 Sanju Y1	3,330,000 .00	307,725,3 00.00			3,330,000 .00	307,725,3 00.00		
total	3,330,000 .00	307,725,3 00.00			3,330,000 .00	307,725,3 00.00		

The increase and decrease of other equity instruments in the current period, the reasons for the changes, and the basis for relevant accounting treatment:

none

other instructions:

none

55. Capital reserves

unit: yuan

project	Opening Balance	increase in this period	Decrease in this period	Ending balance
Capital Premium (Equity Premium)	1,124,202,997.20		89,533,794.37	1,034,669,202.83
Other capital reserve	1,673,349.69		1,673,349.69	
total	1,125,876,346.89		91,207,144.06	1,034,669,202.83

Other explanations, including the increase and decrease in the current period, and explanations for the reasons for the changes:

The change in capital reserve is due to the reduction of capital reserve due to the maturity of the company's "renewable bond-19 Sanju Y1" and the long-term equity investment Jutai's placement of new shares and the exercise of minority shareholders' rights resulting in equity

Capital reserves reduced by passive dilution.

56. Treasury stock

unit: yuan

project	Opening Balance	increase in this period	Decrease in this period	Ending balance
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Other explanations, including the increase and decrease in the current period, and explanations for the reasons for the changes:

57. Other comprehensive income

unit: yuan

Item opening balance		Amount incurred in the current period						Ending balance
		Amount before income tax in the current period	Less: included in other comprehensive income in the previous period and transferred to profit or loss in the current period	Less: included in other comprehensive income in the previous period and transferred to retained earnings in the current period	Deduct: income tax expense	Attributable to the parent company after tax	Attributable to minority shareholders after tax	
2. Other comprehensive income that will be reclassified into profit or loss	94,336,65 3.09	119,229,4 25.90				119,229,4 25.90		24,892,77 2.81
Foreign currency financial statement conversion	94,336,65 3.09	119,229,4 25.90				119,229,4 25.90		24,892,77 2.81
difference Other comprehensive	-	119,229,4				119,229,4		24,892,77

Total income 94,336.65	3.09	25.90				25.90		2.81
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Other explanations, including the adjustment of the initial recognition amount of the hedged item for the effective part of the cash flow hedging profit and loss:

58. Special reserve

unit: yuan

project	Opening Balance	increase in this period	Decrease in this period	Ending balance
safety production fee	3,228,254.28	20,336,276.10	21,130,275.55	2,434,254.83
total	3,228,254.28	20,336,276.10	21,130,275.55	2,434,254.83

Other explanations, including the increase and decrease in the current period, and explanations for the reasons for the changes:

The company needs to comply with the disclosure requirements for "business related to the chemical industry" in the "Guidelines for Self-Regulatory Supervision of Listed Companies of Shenzhen Stock Exchange No. 3 - Industry Information Disclosure"

According to Caizi [2022] No. 136 notice on printing and distributing the "Administrative Measures for the Acquisition and Use of Enterprise Safety Production Expenses", qualified enterprises need to

The actual operating income is the basis for the provision, and the special reserve is withdrawn in the way of excess and regressive. The special reserve provided is mainly used for various items directly related to safety production.

item expenditure.

59. Surplus reserve

unit: yuan

project	Opening Balance	increase in this period	Decrease in this period	Ending balance
Statutory surplus reserve	477,568,783.10			477,568,783.10
total	477,568,783.10			477,568,783.10

Explanation of the surplus reserve, including the increase and decrease in the current period and the reasons for the change:

60. Retained profit

unit: yuan

project	This period	Previous period
Undistributed profit at the end of the previous period before adjustment	3,977,432,000.73	3,957,342,313.85
Adjust the total amount of undistributed profit at the beginning of the period (increase +, decrease -)		-822,398.44
Adjusted initial undistributed profit plus:	3,977,432,000.73	3,956,519,915.41
net profit attributable to owners of the parent company in the current period	-804,432,945.23	81,400,156.54
Less: Withdrawal of statutory surplus reserve		37,178,071.22
Common stock dividend payable	11,731,389.91	
Perpetual bond interest payable	23,310,000.00	23,310,000.00
Undistributed profit at the end of the period	3,137,957,665.59	3,977,432,000.73

Adjust the undistributed profit details at the beginning of the period:

- 1) Due to the retrospective adjustment of the "Accounting Standards for Business Enterprises" and related new regulations, the undistributed profit at the beginning of the period was affected by -1,511,575.74 yuan.
- 2) Due to the change of accounting policy, the undistributed profit at the beginning of the period is affected by 0.00 yuan.
- 3) Due to the correction of major accounting errors, the undistributed profit at the beginning of the period was affected by RMB 0.00.

4). Changes in the scope of consolidation due to the same control will affect the undistributed profit at the beginning of the period by RMB 0.00.

5) The total undistributed profit at the beginning of the period affected by other adjustments is RMB 0.00.

61. Operating income and operating costs

unit: yuan

project	Amount incurred in the current period		Amount incurred in the previous period	
	income	cost	income	cost
Main business	8,619,828,476.11	8,237,566,537.85	5,744,441,539.08	5,019,834,964.38
Other business	28,524,671.20	25,310,589.61	10,460,323.92	3,030,958.27
total	8,648,353,147.31	8,262,877,127.46	5,754,901,863.00	5,022,865,922.65

Is the lower of the net profit before and after deducting non-recurring gains and losses after auditing negative?

Yes No

unit: yuan

project	This year	Specific deductions	first year	Specific deductions
Amount of operating income	8,648,353,147.31 -		5,754,901,863.00 -	
Total amount of business income deduction items	30,223,347.46 -		10,704,510.01 -	
Proportion of the total amount of deduction items of operating income to operating income	0.35% -		0.19% -	
1. Business income not related to the main business				
1. Income from other businesses other than normal operations. Such as rental of fixed assets, intangible assets, packaging materials, sales of materials, exchange of non-monetary assets with materials, operating entrusted management business, etc., and income from listed companies that are included in the main business income but are outside the normal operation of the listed company income.	28,524,671.20	Income from utility bills, sales of materials, leasing, etc.	10,460,323.92	Sales of materials, terminal services, leasing, etc.
3. Income generated from new trading business in the current fiscal year and the previous fiscal	1,698,676.26 Trading business income		244,186.09 Trading business income	
year. Subtotal of business income not related to main business	30,223,347.46 -		10,704,510.01 -	
2. Income without commercial substance				
Subtotal of income without commercial substance	0.00 -		0.00 -	
3. Other income that is not related to the main business or does not have	0.00 -		0.00 -	
commercial substance Amount after deduction of operating income	8,618,129,799.85		5,744,197,352.99 -	

- Income-related information:

Information related to performance obligations:

none

Information related to the transaction price allocated to the remaining performance obligations:

At the end of the reporting period, the amount of income corresponding to the performance obligations that have been signed but not yet fulfilled or not fully fulfilled is 418,993,902.16 yuan, of which 418,993,902.16 yuan is expected to be recognized in 2023.

other instructions:

none

62. Taxes and surcharges

unit: yuan

project	Amount incurred in the current period	Amount incurred in the previous period
Urban maintenance and construction tax	2,925,358.41	8,105,419.60
Education surcharge	1,366,850.21	3,632,502.47
property tax	6,568,580.23	7,284,459.19
land holding tax	6,163,115.15	5,306,719.75
vehicle usage tax	100,210.09	103,639.77
Stamp Duty	4,992,622.75	2,674,816.66
Local Education Additional	914,865.05	2,426,889.23
Environmental	3,766,801.16	16,011.74
Protection	1,141,069.44	980,849.50
Tax Other Total	27,939,472.49	30,531,307.91

other instructions:

63. Sales expenses

unit: yuan

project	Amount incurred in the current period	Amount incurred in the previous period
Employee Salary	29,180,444.53	33,478,218.99
Advertising Expenses	165,551.85	177,705.88
Transportation	7,233,390.89	3,958,190.79
Expenses Travel	2,527,070.36	2,726,194.21
Expenses Business	5,589,556.31	3,333,855.19
Expenses Office	66,229.17	110,902.90
Expenses	817,041.91	868,347.38
Depreciation	31,843.67	61,526.60
Expenses	323,738.88	423,409.53
Communication	47,518.80	11,314.97
Expenses Vehicle	7,200.00	152,698.11
Expenses	78,683.09	63,088.58
Transportation	1,128,464.62	609,574.98
Expenses Conference Expenses	14,424,909.53 2,373.67	12,495,206.16 2,394.46
Mailing Expenses Bidding Fees Technical	2,053,021.56	1,787,173.30
Service Expenses	335,588.03	315,119.50
Low-value Consumables Amortization Storage Expenses Network Transaction Expenses		

Total	2,474,840.51	1,592,114.69
other	66,487,467.38	62,167,036.22

other instructions:

64. Administrative expenses

unit: yuan

project	Amount incurred in the current period	Amount incurred in the previous period
Employee Salary	144,584,025.85	165,714,347.43
Depreciation	91,757,045.17	58,502,635.87
Expenses Asset	21,390,185.19	20,292,932.34
Amortization Business	2,447,869.07	3,792,928.52
Hospitality	21,072,658.92	23,291,656.67
Expenses	1,385,441.96	2,699,016.30
Leasing Expenses Travel	2,765,377.05	3,446,526.64
Expenses Transportation	9,653,049.16	6,871,878.24
Expenses	2,780,159.65	8,266,075.50
Consulting	2,951,190.69	6,329,448.58
Expenses Office	637,376.56	1,246,357.46
Expenses Water	37,316.82	158,732.48
and Electricity Expenses	1,015,754.70	787,944.78
Communication Expenses	2,386,454.07	2,485,280.78
Conference	123,392.02	159,125.63
Expenses Board	1,261,884.02	4,254,824.55
Membership	778,401.00	1,701,018.81
Technical Service	2,472,698.20	2,946,391.37
Expenses Greening Expenses Labor Expenses Commuting		43,526,007.43
Expenses Litigation Expenses	21,257,873.20	22,661,844.16
Equity Incentives	1,822,843.98	323,336.33
and Changes	4,031,857.60	7,302,683.34
Related Expenses Intermediary Service	1,733,384.02	1,324,060.87
Expenses	7,359,701.74	6,864,568.95
Insurance Expenses Maintenance fee Employment security fund for the disabled Other total	345,705,940.64	394,949,623.03

other instructions:

65. Research and development expenses

unit: yuan

project	Amount incurred in the current period	Amount incurred in the previous period
Staff salaries,	53,237,799.53	72,636,630.01
depreciation and amortization	32,964,408.38	43,157,574.53
expenses,	123,053,340.39	54,521,338.67
material	64,579.58	574,161.81
expenses, communication	220,770.30	223,892.24
expenses, office	128,406.31	6,010,047.97
and travel	3,324,157.70	2,048,617.97
expenses, testing expenses,	2,790,937.90	1,305,140.71
water and	1,038,079.78	1,960,808.21
electricity	909,443.67	991,374.65
expenses, technical service fees, patent fees, rental fees, labor expenses	897,318.44	

Total	507,947.48	773,734.85
other	219,137,189.46	184,285,598.08

other instructions:

66. Financial expenses

unit: yuan

project	Amount incurred in the current period	Amount incurred in the previous period
Interest	338,805,434.59	192,892,523.95
expense minus:	22,602,727.85	22,218,325.07
Interest income		3,594,364.69
plus: Exchange	13,810,097.94	
loss	15,068,676.72	9,358,890.01
minus: Total exchange fee	317,461,285.52	183,627,453.58

other instructions:

67. Other income

unit: yuan

Sources of Other Income Generated by	Amount incurred in the current period	Amount incurred in the previous period
the Beijing Agency of the Patent Office of the State Intellectual Property Office Patent	182,000.00	504,000.00
Subsidy Funds Individual Tax	160,832.71	252,902.64
Handling Fee	963,952.58	701,977.01
Refunds for Job Stabilization Subsidies for Major Science and Technology	200,000.00	150,000.00
Special Thematic Projects in Fujian Province Zhongguancun National Independent Innovation Demonstration Zone Promotes	2,000,000.00	
Deep Integration of Technology and Finance	349,213.49	349,213.49
Development Support Funds Enterprise Foundation	263,776.27	263,776.27
Supporting facilities subsidy funds Shenyang Industrial Development	823,285.64	823,285.64
Fund subsidy Funds for infrastructure construction New construction, expansion	286,486.48	286,486.48
and renovation funds Shenyang Municipal Finance Bureau 2017 Emerging		500,000.00
Industry Development Special Funds Shenyang Municipal	1,522,857.12	1,522,857.12
Finance Bureau Small and medium-sized high-tech	274,247.50	8,479.28
enterprise loan interest discounts Fixed asset loan interest discounts and		390,000.00
investment subsidies Value-added tax Added input tax to offset R&D expenses of	329,748.00	329,748.00
scientific and technological enterprises Subsidy fund for infrastructure construction	464,242.44	464,242.44
of Alxa Economic Development Zone	201,586.26	158,291.66
Management Committee Infrastructure subsidy fund for bailout special fund		200,000.00
Loan interest discount 2020 service industry "small" Incentives for business contribution rewards Bozhou	115,714.20	115,714.20
Sanju Lvhui 10,000-ton Straw Biomass	189,000.00	141,750.00
Comprehensive Recycling Project 2015 Provincial Technical Transformation	528,000.00	396,000.00
Project with an annual output of 150,000 tons of Methoxydimethyl Ether Project Special Subsidy Sichuan Action and Innovation Driven Fund	249,999.96	187,499.97

Penglai Government Subsidy (Land Return Fund) Government		121,781.40
Subsidy Fund for the 13th Five-Year Project Project		199,999.98
Subsidy Fund for Penglai Science and Technology		600,000.00
Bureau Project Subsidy Fund for Penglai District Industry and Information		573,100.00
Technology Bureau Manufacturing Strong Industry Subsidy Fund for High-quality Extra-thick Steel Plate Green		940,000.00
Production and Efficient Manufacturing Technology Project Subsidy Fund for Ocean Engineering Special steel plate		1,330,000.00
preparation key technology research and application project subsidy Zhuhai Equipment Insurance Fund		451,000.00
Management Center Enterprise employee training subsidy Offshore oil, gas and water process		458,500.00
module production line construction technical transformation project Offshore		189,000.00
engineering equipment general production line technical		1,283,098.21
transformation project Automatic		325,000.00
sandblasting and lifting technology transformation Project machinery and		2,835,700.42
equipment subsidy funds 2019 Provincial marine strategic emerging industry	160,000.00	
project Wuda District Industry Information and Technology Bureau technology transaction subsidy	151,000.00	
Wuda District Industry Information Technology Bureau research and development post-	222,000.00	
investment	624,046.76	527,540.17
subsidy funds Wuhai Science and Technology Bureau enterprise R&D post-investment subsidy Total other	10,261,989.41	17,580,944.38

68. Investment income

unit: yuan

project	Amount incurred in the current period	Amount incurred in the previous period
Long-term equity investment income calculated by equity method	-117,753,116.48	-34,222,490.92
Investment income from disposal of long-term equity investment		59,231,839.20
After the loss of control over the investment income obtained		81,160.72
from the disposal of financial assets held for trading, the remaining equity is remeasured at fair value.		10,387,261.20
Debt restructuring income	5,402,533.90	2,344,420.00
Investment income from other non-current financial assets during the holding		-5,213,692.81
period Total investment income from derecognition of		-6,693,438.72
financial assets	-112,350,582.58	25,915,058.67

other instructions:

69. Net exposure hedging income

unit: yuan

project	Amount incurred in the current period	Amount incurred in the previous period
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other instructions:

70. Income from changes in fair value

unit: yuan

Sources of income from changes in fair value	Amount incurred in the current period	Amount incurred in the previous period
trading financial assets		6,408,430.00
Including: income from changes in fair value of derivative financial instruments		6,408,430.00
total		6,408,430.00

other instructions:

71. Credit impairment losses

unit: yuan

project	Amount incurred in the current period	Amount incurred in the previous period
Bad debt losses of other receivables	-54,569,010.73	-70,235,746.44
Total bad debt losses of accounts receivable	-184,657,114.02	364,304,839.96
	-239,226,124.75	294,069,093.52

other instructions:

72. Asset impairment losses

unit: yuan

project	Amount incurred in the current period	Amount incurred in the previous period
2. Inventory depreciation loss and contract performance cost impairment loss	-43,798,038.27	-31,853,545.95
V. Impairment losses of fixed assets		-5,522,368.39
X. Impairment losses of intangible assets	-1,750,000.00	
11. Goodwill impairment loss		-3,735,945.52
12. Contract asset impairment losses	-51,796,809.13	7,908,018.36
total	-97,344,847.40	-33,203,841.50

other instructions:

73. Income from asset disposal

unit: yuan

Sources of asset disposal income	Amount incurred in the current period	Amount incurred in the previous period
Gains or losses arising from disposals not classified as fixed assets held for sale, construction in progress, productive biological assets and intangible assets	12,763,811.49	1,724,187.20

74. Non-operating income

unit: yuan

project	Amount incurred in the current period	Amount incurred in the previous period	The amount included in the current non-recurring profit and loss
Gains from damage and scrapping of non-current assets Liquidated damages	222,954.03	3,891,608.38	222,954.03
income	900,515.49	1,851,459.77	900,515.49
Others Total	1,123,469.52	5,962,310.04	1,123,469.52

Government subsidies included in current profit and loss:

unit: yuan

Types of reasons for granting subsidy projects				Does the subsidy affect the profit and loss of the year	Is there a special subsidy	Amount incurred in this period	Amount incurred in the previous period	Asset-Related/ Revenue-Related
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other instructions:

75. Non-operating expenses

unit: yuan

project	Amount incurred in the current period	Amount incurred in the previous period	The amount included in the current non-recurring profit and loss
External donations		278,533.31	
Non-current assets Damaged and scrapped	19,655.41	189,457.16	19,655.41
losses		157,271.04	
Extraordinary losses	3,114,158.04	10,363,326.98	3,114,158.04
Breach	1,303,264.87	220,849.22	1,303,264.87
of contract fines Other total	4,437,078.32	11,209,437.71	4,437,078.32

other instructions:

76. Income tax expenses

(1) Income tax expense table

unit: yuan

project	Amount incurred in the current period	Amount incurred in the previous period
Current income tax expense	15,439,027.31	41,681,727.81
Deferred income tax expense	-41,823,074.90	87,529,242.61
total	-26,384,047.59	129,210,970.42

(2) Adjustment process of accounting profit and income tax expenses

unit: yuan

project	Amount incurred in the current period
The total profit	-1,020,464,698.27

Income tax expense calculated at statutory/applicable tax rate	-153,069,704.74
The impact of different tax rates applicable to subsidiaries	-36,958,990.08
Adjusting the impact of income tax in previous periods	203,228.59
Impact on non-taxable income	-8,116,234.08
Effect of non-deductible costs, expenses and losses	22,900,402.49
Effects of using deductible losses of deferred income tax assets not recognized in	-472,097.35
the previous period Effects of deductible temporary differences or deductible losses of deferred income	145,361,748.68
tax assets not recognized in the current period "Fill in) Equity-based	-15,004,060.33
profit and loss of joint ventures and joint ventures plus	18,796,390.26
deduction of income tax	-24,731.03
expenses for wages of disabled persons	-26,384,047.59

other instructions:

77. Other comprehensive income

See Note VII, 57 for details.

78. Cash flow statement items

(1) Other cash received related to operating activities

unit: yuan

project	Amount incurred in the current period	Amount incurred in the previous period
Refunds of inter-revenue	4,575,532.44	6,736,204.19
funds of other units	611,966.92	9,623,654.52
Refund of government	5,639,293.31	9,616,795.21
subsidy interest	4,576,305.04	10,742,886.68
income Security deposits	8,010,816.48	6,652,883.49
received Value-added tax residual tax		91,109,026.83
refunds Tax	78,388,948.38	
refunds Unfrozen funds Total	6,332,457.95	5,681,394.15
other funds received	108,135,320.52	140,162,845.07

Description of other cash received related to operating activities:

(2) Other cash paid related to operating activities

unit: yuan

project	Amount incurred in the current period	Amount incurred in the previous period
Imprest funds paid by	1,188,426.07	6,097,316.12
other units' current	6,347,136.19	5,990,869.63
funds Cash	141,165,535.82	198,624,419.37
payment expenses	50,777,439.09	24,885,531.99
Security		3,009,499.46
deposits paid by frozen	2,304,535.21	1,133,237.44
funds Total other payments	201,783,072.38	239,740,874.01

Description of other cash payments related to operating activities:

(3) Other cash received related to investment activities

unit: yuan

The	Amount incurred in the current period	Amount incurred in the previous period
cash and cash equivalents held by the company on the date of merger not under		2,986,643.19
the same control	90,000,000.00	
	90,000,000.00	2,986,643.19

Notes on other cash received related to investing activities:

(4) Other cash paid related to investment activities

unit: yuan

The	Amount incurred in the current period	Amount incurred in the previous period
total cash and cash equivalents held by the company on the day when the		1,312,360,125.43
control of the		90,000,000.00
project is lost		1,402,360,125.43

Description of other cash payments related to investment activities:

(5) Other cash received related to financing activities

unit: yuan

project	Amount incurred in the current period	Amount incurred in the previous period
Lease	1,127,725,000.00	
payments, bank acceptance bills,	60,327,956.19	105,669,880.06
deposits, etc., total financial support funds from HISIC	2,524,880,000.00	3,007,820,000.00
and HISIC	3,712,932,956.19	3,113,489,880.06

Other notes on cash received related to financing activities:

(6) Other cash paid related to financing activities

unit: yuan

project	Amount incurred in the current period	Amount incurred in the previous period
Lease	500,238,453.47	331,542,479.79
payment, bank acceptance bill security		145,248,000.00
deposit, etc. Hai Guotou Group and Hai Guotou's financial	2,122,079,074.85	2,257,886,634.00
assistance	18,000,000.00	100,000,000.00
funds,	15,550,870.26	
guarantee	9,438,555.10	
fees for current funds, etc. Total	2,665,306,953.68	2,834,677,113.79

Other descriptions of cash paid related to financing activities:

79. Supplementary information on cash flow statement

(1) Supplementary information on the cash flow statement

unit: yuan

additional materials	Current Amount	Previous amount
1. Reconcile net income to cash flow from operating activities		
net profit	-994,080,650.68	54,510,695.71
Add: depreciation of fixed	336,570,972.15	-260,865,252.02
assets, depreciation of oil and gas assets, depreciation of productive biological assets	442,089,011.96	301,847,172.66
Depreciation of right-of-use assets	5,917,333.28	6,078,335.43
Amortization of intangible assets	55,890,802.66	54,293,488.47
Amortization of long-term deferred expenses	16,640,790.81	28,688,033.91
Losses from disposal of fixed assets, intangible assets and other long-term assets (gains are listed with "-")	-12,763,811.49	-1,724,187.20
Losses from scrapping fixed assets (the income is listed with "-")	19,655.41	-29,784.73
Losses from changes in fair value (gains are listed with "-")		-6,408,430.00
Financial expenses (receipts are filled with "-" List)	320,196,670.53	181,628,045.39
Investment loss (income is filled with "-" List)	112,350,582.58	-25,915,058.67
Decrease in deferred income tax assets (increased by "-")	-37,174,807.79	89,230,238.72
Increase in deferred income tax liabilities (decrease is marked with "-")	-4,648,267.11	-1,700,996.11
Decrease in inventory (increased by "-")	-834,015,577.12	306,600,709.24
Decrease in operating receivables (increase Fill in with "-" sign)	-428,378,040.47	568,148,692.81
Increase in operating payables (decrease Fill in with "-" sign)	510,794,852.11	-270,078,753.47
other		
Net cash flow from operating activities	-510,590,483.17	1,024,302,950.14
2. Significant investment and financing activities that do not involve cash receipts and payments		
Conversion of debt into capital		
Convertible corporate bonds due within one year		
Finance lease fixed assets		
3. Net changes in cash and cash equivalents:		

Closing balance of cash	443,990,646.43	346,680,504.74
Less: Opening balance of cash	346,680,504.74	1,682,029,837.16
Plus: Closing balance of cash equivalents		
Less: Opening balance of cash equivalents		
Net increase in cash and cash equivalents	97,310,141.69	-1,335,349,332.42

(2) Net cash paid for acquisition of subsidiaries in the current period

unit: yuan

	the amount
in:	
in:	
in:	

other instructions:

(3) Net cash received from disposal of subsidiaries in the current period

unit: yuan

	the amount
in:	
in:	
in:	

other instructions:

(4) Composition of cash and cash equivalents

unit: yuan

project	Ending balance	Opening Balance
1. Cash	443,990,646.43	346,680,504.74
Including: cash on hand	29,454.40	49,674.79
Bank deposits ready for payment	431,537,120.71	272,212,275.77
Other monetary assets readily available for payment <small>Money</small>	12,424,071.32	74,418,554.18
3. Balance of cash and cash equivalents at the end of the period	443,990,646.43	346,680,504.74

other instructions:

80. Notes to items in the statement of changes in owner's equity

Explain the name of the "other" items and the adjusted amount for the adjustment of the closing balance of the previous year:

81. Assets whose ownership or right to use is restricted

unit: yuan

project	Ending book value	Restricted reason
Monetary	41,411,819.61	For details, see Note VII. 1. Monetary funds
Fund Fixed Assets	1,957,778,677.30	Mortgage, sale and leaseback, litigation
intangible assets	29,742,192.85	Mortgage, involved in litigation
total	2,028,932,689.76	

other instructions:

82. Monetary items in foreign currency

(1) Foreign currency monetary items

unit: yuan

project	Ending foreign currency balance	Conversion rate	RMB balance at the end of the period
Money funds			164,366,933.90
Of which: USD	23,466,822.70	6.9646	163,437,033.35
EUR			
Accounts	447,615.55	0.8933	399,854.97
receivable in Hong Kong	102,264.20	5.1831	530,045.58
dollars and Singapore dollars			282,546,136.33
Of which: USD	6,313,757.87	6.9646	43,972,798.06
EUR			
Hong Kong dollar	267,069,672.31	0.8933	238,573,338.27
Long term loan			
Of which: USD			
EUR			
Other			
receivables in			57,262,690.84
HKD including:	2,134,397.84	6.9646	14,865,227.20
USD,	47,169,913.01	0.8933	42,136,883.29
HKD, SGD	50,275.00	5.1831	260,580.35
Accounts			342,193,135.82
payable, of which:	826,093.21	6.9646	5,753,408.77
USD,	376,625,687.95	0.8933	336,439,727.05
HKD Other			371,611,978.14
payables, of	413,646,654.41	0.8933	369,510,556.38
which: HKD, SGD	405,437.24	5.1831	2,101,421.76

other instructions:

(2) Explanation of overseas operating entities, including for important overseas operating entities, the main overseas business location, functional currency for bookkeeping and the basis for selection should be disclosed, and the reasons for changes in the functional currency for bookkeeping should also be disclosed.

Applicable Not applicable

Company Name	Main place of business	Registration	Reporting currency	Select basis
SJ ENVIRONMENTAL CORP Houston, USA		Houston, USA	Dollar	The currency used in the main business environment where the business is located is the functional currency for bookkeeping
Sanju Environmental Protection (Hong Kong) Co., Ltd. Hong Kong Special Administrative Region Hong Kong Special Administrative Region			Hong Kong dollar	The currency used in the main business environment where the business is located is the functional currency for bookkeeping
HAIXIN ENERGY TECHNOLOGY INTERNATIONAL PTE.LTD.	Singapore	Singapore	singapore dollar	The currency used in the main business environment where the business is located is the functional currency for bookkeeping

83. Hedging

Disclose qualitative and quantitative information on hedging items, related hedging instruments, and hedged risks according to hedging categories:

none

84. Government subsidies

(1) Basic information on government subsidies

unit: yuan

Type	the amount	Presentation items	Amount included in current profit and loss
Renewable energy electrolytic hydrogen production - low-temperature and low-pressure	1,008,000.00	Deferred income	
synthetic ammonia key technology and application project State	182,000.00	other income	182,000.00
Intellectual Property Office	160,832.71	other income	160,832.71
Patent Office	963,952.58	other income	963,952.58
Beijing Agency Patent Subsidy Fund Individual Tax Handling Fee	200,000.00	other income	200,000.00
Return Stable Job Subsidy Fujian Province Science and Technology Major Special Topic Project Funding	2,000,000.00	other income	2,000,000.00
Zhongguancun National Independent	201,586.26	other income	201,586.26
Innovation Demonstration The district promotes the deep	160,000.00	other income	160,000.00
integration of science and technology and finance development support	151,000.00	other income	151,000.00
funds special funds for bailout interest discount Wuda District Industry	222,000.00	other income	222,000.00
	389,921.76	other income	389,921.76
Information and Technology Bureau technology transaction subsidies Other total	5,639,293.31		4,631,293.31

(2) Return of government subsidies

ApplicableNot applicable

other instructions:

85. Others

none

8. Changes in the scope of consolidation

1. Business combination not under the same control

(1) Business combinations involving enterprises not under common control in the current period

Unit: yuan Net profit

The name of the purchased party	Equity Acquisition Time	Equity Acquisition Cost	Equity Acquisition Ratio	Equity Acquisition Method	date of purchase	Basis for Determining the Date of Purchase	Income of the acquired party from the purchase date to the end of the period	of the purchased party from the purchase date to the end of the period
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other instructions:

(2) Merger cost and goodwill

(3) The identifiable assets and liabilities of the acquiree on the date of purchase

(4) Gains or losses arising from the remeasurement of the equity held before the purchase date according to the fair value

Whether there is a transaction in which the business combination is realized step by step through multiple transactions and control is obtained during the reporting period

YesNo

(5) Relevant explanations that the consideration for the merger or the fair value of the identifiable assets and liabilities of the purchased party cannot be reasonably determined on the date of purchase or at the end of the current merger period

none

(6) Other instructions

none

2. Business combination under the same control

(1) Business combination under the same control occurred in the current period

unit: yuan

merged party name	Proportion of Equity Acquired in Business Combination	Combining business combinations under the same control	merger date	Basis for Determining the Date of Merger	Revenue of the merged party from the beginning of the current period to the date of	Net of the merged party from the beginning of the merger period to the merger date	Revenue of the merged party during the comparative period	Net profit of the merged party during the comparative period
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		in accordance with			enter	profit		
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other instructions:

(2) Merger cost

(3) The book value of the assets and liabilities of the merged party on the merger date

unit: yuan

This is the text content	merger date	the end of the previous period
assets:		
Money funds		
Accounts receivable		
stock		
fixed assets		
intangible assets		
Liabilities:		
loan		
Payables		
Net assets		
Less: Minority interests		
net worth acquired		

The contingent liabilities of the merged party assumed in the business combination:

other instructions:

3. Reverse purchase

Basic information on the transaction, the basis for the transaction to constitute a reverse purchase, whether the assets and liabilities retained by the listed company constitute a business and its basis, the determination of the merger cost, the amount of equity adjustment and its calculation when processing an equity transaction:

4. Disposal of subsidiaries

Whether there is a situation where a single disposal of investment in subsidiaries results in loss of control

YesNo

Whether there is a situation in which the investment in subsidiaries is disposed of step by step through multiple transactions and the control right is lost in the current period

YesNo

5. Changes in the scope of consolidation for other reasons

Explain the changes in the scope of consolidation caused by other reasons (such as the establishment of new subsidiaries, liquidation of subsidiaries, etc.) and related situations:

Subsidiary type	Company Name	business nature	Obtaining method	Change from previous year
Wholly owned subsidiary	HAIXIN ENERGY TECHNOLOGY INTERNATIONAL PTE.LTD.	General trade and consulting services	Investment and establishment	new additions in this period

6. Others

none

9. Interests in other entities

1. Interests in subsidiaries

(1) Composition of enterprise groups

Subsidiary name Main place of business	Registration place		business nature	Shareholding ratio		Obtaining method
				direct	indirect	
Beijing Sanju Green Energy Technology Co., Ltd.	Haidian District, Beijing	Haidian District, Beijing	Technical services, sales of chemical products sales	100.00%		Investment establishment
Suzhou Hengsheng New Material Co., Ltd.	Wujiang City, Jiangsu Province	Wujiang City, Jiangsu Province	of petrochemical catalysts, research and development of high-tech materials projects	100.00%		Mergers not under common control
Shenyang Sanju Kate Catalyst Co., Ltd.	Shenyang Economic and Technological Development Zone, Liaoning Province	Shenyang Economic and Technological Development Zone, Liaoning Province	Production of catalysts and new catalytic materials	100.00%		Investment establishment
SJ ENVIRONMENTAL CORP	Houston, USA		Entrusted production and processing of chemical products, machinery and equipment; procurement and sales of petroleum and	100.00%		Investment establishment
Hebei Brilliance Petrochemical Co., Ltd. Daqing Sanju	Huanghua City, Hebei Province	Daqing City, Heilongjiang Province,	chemical products such as commodity and	80.00%		Mergers not under common control
Energy Purification Co., Ltd.	Daqing City, Heilongjiang Province	Luqiao Town Industrial Zone, Huanghua City	equipment leasing and service business; production and	60.00%		Investment establishment
Heilongjiang Sanju Beidahuang Biomass New Material Co., Ltd.	Harbin City, Heilongjiang Province	Nangang District, Harbin City, Heilongjiang Province	sales of styrene and neopentyl glycol; production and sales of fertilizers; production and supply of electricity, heat and gas	52.00%		Investment establishment
Inner Mongolia Sanju Jiajing New Energy Co., Ltd.	Alashan Economic Development Zone, Inner Mongolia	Alashan Economic Development Zone, Inner Mongolia	Clean LNG Production and Sales	100.00%		Investment establishment
Wuhan Jinzhong Engineering Technology Co., Ltd.	Wuhan City, Hubei Province	Wuhan City, Hubei Province	Technical services, engineering survey and design, construction general contracting, engineering project	51.00%1		Mergers not under common control
Nanjing Sanju Biomass New Material Technology Co., Ltd.	Nanjing City, Jiangsu Province	Nanjing City, Jiangsu Province	management Research and development of new biomass materials; agricultural biomass carbonization technology	100.00%		Investment establishment

			Research and			
Beijing Sanju Energy Purification Engineering Co., Ltd.	Chaoyang District, Beijing	Chaoyang District, Beijing	development and other engineering survey and design, engineering project management	100.00%		Investment establishment
Fujian Sanju Fuda Chemical Fertilizer Catalyst National Engineering Research Center Co., Ltd. Hainan	Fuzhou City, Fujian Province	Fuzhou City, Fujian Province	Fertilizer and coal chemical related technology research and development and transfer of achievements	66.67%		Investment establishment
Sanju Green Energy Research Institute Co., Ltd.	Lingshui County, Hainan Province	Lingshui County, Hainan Province	High-quality biomass resource utilization feasibility research and	100.00%		Investment establishment
Sanju Environmental Protection (Hong Kong) Co., Ltd.	Hong Kong Special Administrative Region	Hong Kong Special Administrative Region	development and other energy field technical services, equipment and material sales, investment	100.00%		Investment establishment
Beijing Huashi United Energy Technology Development Co., Ltd.	Haidian District, Beijing	Haidian District, Beijing	and investment management engineering survey and design; construction general contracting;	51.22%		Mergers not under common control
Beijing Sanju Green Source Co., Ltd.	Haidian District, Beijing	Haidian District, Beijing	construction project management; engineering consulting	80.02%		Investment establishment
Hebi Sanju Bioenergy Co., Ltd. Sichuan Xinda New	Hebi City, Henan Province	Hebi City, Henan Province	and other technology development, technology promotion, technical services, etc. Biomass fuel production, sales, etc.	100.00%		Investment establishment
Energy Technology Co., Ltd. Shandong Sanju	Jiangyou City, Sichuan Province	Jiangyou City, Sichuan Province	R&D and sales of new energy technology products	55.00%		Mergers not under common control
Bioenergy Co., Ltd.	Rizhao City, Shandong Province	Rizhao City, Shandong Province	Production and sales of biofuels	84.62%		Mergers not under common control
Guangxi Sanju Bioenergy Co., Ltd.	Tieshangang District, Beihai City, Guangxi Zhuang Autonomous Region	Tieshangang District, Beihai City, Guangxi Zhuang Autonomous Region	Production and sales of biofuels	100.00%		Investment establishment
Shenyang Juye New Energy Technology Co., Ltd.	Shenyang City, Liaoning Province	Shenyang City, Liaoning Province	Chemical technology development, technology transfer, technology promotion, technical consultation, technical		100.00% investment	to set up
Dalian Wudalian Oil Petrochemical Co., Ltd.	Dalian City, Liaoning Province	Dalian City, Liaoning Province	services; international trade, entrepot trade,		100.00%	Mergers not under the same
Inner Mongolia Juhe Chemical Co., Ltd.	Alashan Economic Development Zone, Inner Mongolia	Alashan Economic Development Zone, Inner Mongolia	etc. Coal, coke, wax, lubricating oil, etc.		100.00%	control Mergers not under the same control
Tongjiang Sanju Lvyuan Biomass New Material Co., Ltd. Xing'an League	Tongjiang City, Jiamusi City, Heilongjiang	Tongjiang City, Jiamusi City, Heilongjiang	Straw biomass collection and processing, etc.		100.00% investment	to set up
Sanju Lvyuan Biomass New Material Co., Ltd.	Inner Mongolia Xing'an League	Inner Mongolia Xing'an League	Straw biomass collection and processing, etc.		100.00% investment	to set up
Hulunbeier Sanju Lvyuan Biomass New Material Co., Ltd.	Nierji Town, Moli Dawa Daur Autonomous Banner, Hulunbeier City, Inner Mongolia	Nierji Town, Moli Dawa Daur Autonomous Banner, Hulunbeier City, Inner Mongolia	Straw biomass collection and processing, etc.		100.00% investment	to set up
Kaifeng Sanju Lvbao Biomass New Material Co., Ltd. Suzhou City Sanju	Kaifeng City, Henan Province	Kaifeng City, Henan Province	Straw biomass collection and processing, etc.		100.00% investment	to set up
Green Suzhou City, Anhui Province	Suzhou City, Anhui Province				100.00% investment	to set up

Yuanyuan Biomass New Material Co., Ltd.			collection and processing etc.			
Bozhou Sanju Lvhui Biomass New Material Co., Ltd. Mianyang Sanju	Bozhou City, Anhui Province	Bozhou City, Anhui Province	Straw biomass collection and processing, etc.		100.00% investment	to set up
Lvyan Biomass New Material Co., Ltd.	Mianyang City, Sichuan Province	Mianyang City, Sichuan Province	Straw biomass collection and processing, etc.		100.00% investment	to set up
Zhejiang Jujin Biomass Technology Co., Ltd.	Jinhua City, Zhejiang Province	Jinhua City, Zhejiang Province	Aquaculture waste carbonization technology, technology research and development of biomass energy products, etc.		67.00% Investment	and establishment
Fuxin Sanju Lvyan Biomass New Material Co., Ltd. Henan Sanju Lvyan	Fuxin City, Liaoning Province	Fuxin City, Liaoning Province	Straw biomass collection and processing, etc.		100.00% investment	to set up
Biomass New Material Technology Co., Ltd. Pingluo County Sanju Lvyan	Xincui County, Zhumadian City, Henan Province	Xincui County, Zhumadian City, Henan Province	Straw biomass collection and processing, etc.		100.00% investment	to set up
Biomass New Material Co., Ltd. Jiyuan Sanju Lvyan Biomass New Material Co., Ltd.	Pingluo County, Shizuishan City, Ningxia Province	Pingluo County, Shizuishan City, Ningxia Province	Straw biomass collection and processing, etc.		100.00% investment	to set up
	Jiyuan City, Henan Province	Jiyuan City, Henan Province	Manufacturing and sales of biomass materials		51.00% Investment	and establishment
SANJU ENVIRONMENTAL PROTECTION (MALAYSIA) SDN. Ltd	Kuala Lumpur, Malaysia	Kuala Lumpur, Malaysia	Procurement, recycling, processing, warehousing, import and export of palm oil, waste oil, waste animal and vegetable oil, production and	100.00%		Investment establishment
Inner Mongolia Meifang Coal Coking Co., Ltd.	Wuhai City, Inner Mongolia	Wuhai City, Inner Mongolia	sales of coke products, ammonium sulfate, desulfurizer, coal tar, sulfur, crude benzene, coke sales,	70.00%		Mergers not under common control
Inner Mongolia Meifang Coal Chemical Co., Ltd.	Wuhai City, Inner Mongolia	Wuhai City, Inner Mongolia	machinery and equipment leasing,		100.00%	Mergers not under common control
HAIXIN ENERGY TECHNOLOGY INTERNATIONAL L PTE.LTD.	Singapore	Singapore	General trade and consulting services	100.00%		Investment establishment

Note: 1. The company holds 51% equity of Wuhan Jinzhong Engineering Technology Co., Ltd. (formerly Wuhan Jinzhong Petrochemical Engineering Co., Ltd.), and Beijing Huashi United Energy Technology Development Co., Ltd., a subsidiary of the company, holds Wuhan Jinzhong Engineering Technology Co., Ltd. (formerly Wuhan Jinzhong Petrochemical Engineering Co., Ltd.) 29% equity.

Explanation on the difference between the shareholding ratio in the subsidiary and the voting right ratio:

Basis for holding half or less of the voting rights but still controlling the invested entity, and holding more than half of the voting rights but not controlling the invested entity:

none

For important structured entities included in the scope of consolidation, the basis for control:

none

Basis for determining whether a company is an agent or a principal:

none

other instructions:

none

(2) Important non-wholly owned subsidiaries

unit: yuan

Subsidiary name	Minority Shareholding Ratio	Profit and loss attributable to minority shareholders in the current period	Dividends declared for distribution to minority shareholders in the current period	Balance of minority shareholders' equity at the end of the period
Daqing Sanju Energy Purification Co., Ltd.	40.00%	-20,466,077.11		19,502,070.20
Wuhan Jinzhong Engineering Technology Co., Ltd.	20.00%	-6,535,659.46		27,595,414.51
Beijing Huashi United Energy Technology Development Co., Ltd.	48.78%	-3,747,272.47		151,614,960.32
Fujian Sanju Fuda Chemical Fertilizer Catalyst National Engineering	33.33%	9,902.92		8,442,572.51
Sichuan Research Center Co., Ltd.	45.00%	-58,883,033.08		-124,909,024.87
Shandong Energy Technology Co., Ltd.	15.38%	2,047,297.73		52,412,822.31
Sanju Bioenergy Co., Ltd. Company Inner Mongolia Meifang Coal Coking Co., Ltd.	30.00%	-90,035,527.25		401,613,502.37

Explanation for the shareholding ratio of minority shareholders of subsidiaries different from the ratio of voting rights:

none

other instructions:

none

(3) Main financial information of important non-wholly owned subsidiaries

unit: yuan

Subsidiary name	Ending balance						Opening Balance					
	current assets	Non-current assets	total assets	Current liabilities	Non-current liabilities	Total Liabilities	current assets	Non-current assets	total assets	Current liabilities	Non-current liabilities	Total Liabilities
Daqing Sanju Energy	157,984,755.09	171,329,436.21	329,314,191.30	277,132,587.05	3,426,428.76	280,559,015.81	165,706,302.61	218,176,791.40	383,883,094.01	278,201,683.27	4,949,285.88	283,150,969.15
	478,857,927.33	26,696,846.18	505,554,773.51	367,577,700.94	0.00	367,577,700.94	531,761,669.61	19,755,802.81	551,517,472.42	380,862,102.56		380,862,102.56
Purification Co., Ltd. Wuhan Jinzhong Engineering Technology Co., Ltd. Beijing Huashi United Energy	224,248,878.17	87,654,555.01	311,903,433.18	1,089,656.39	0.00	1,089,656.39	216,774,195.37	101,745,511.09	318,519,706.46	23,944.29		23,944.29

	21,42 0,954 .62	4,018 ,153. 41	25,43 9,108 .03	111,8 57.82	0.00	111,8 57.82	20,74 7,526 .26	4,562 ,812. 26	25,31 0,338 .52	12,80 0.03		12,80 0.03
	22,11 4,821 .69	531,3 85,73 2.11	553,5 00,55 3.80	817,0 84,47 2.81	15,73 0,394 .49	832,8 14,86 7.30	38,01 5,220 .28	591,6 56,92 5.29	629,6 72,14 5.57	768,0 62,06 3.48	10,52 5,012 .93	778,5 87,07 6.41
	517,3 99,60 6.64	1,364 ,985, 296.0 4	1,882 ,384, 902.6 8	1,291 ,079, 229.3 6	250,5 40,96 8.21	1,541 ,620, 197.5 7	328,7 28,14 7.39	1,351 ,550, 680.9 4	1,680 ,278, 828.3 3	1,265 ,393, 092.7 3	87,10 7,366 .68	1,352 ,500, 459.4 1
	933,6 34,28 2.25	1,917 ,410, 706.8 2	2,851 ,044, 989.0 7	1,436 ,832, 994.1 7	98,56 9,071 .80	1,535 ,402, 065.9 7	464,1 77,79 8.24	2,000 ,079, 648.4 1	2,464 ,257, 446.6 5	874,2 37,93 5.22		874,2 37,93 5.22

Technology Development Co., Ltd. Fujian Sanju Fuda Chemical Fertilizer Catalyst National Engineering Research Center Co., Ltd. Sichuan Xinda New Energy Technology Co., Ltd. Shandong Sanju Bioenergy Co., Ltd. Inner Mongolia Meifang Co., Ltd.

unit: yuan

Subsidiary name	Amount incurred in the current period				Amount incurred in the previous period			
	Operating Income	Net Profit	Total comprehensive income	cash flow from operating activities	Operating Income	Net Profit	Total comprehensive income	cash flow from operating activities
Daqing Sanju Energy Purification Co., Ltd.	920,724,4 30.05	51,165,19 2.78	51,165,19 2.78	18,185,33 1.88	1,180,401 ,405.12	35,782,09 6.07	35,782,09 6.07	104,647,0 51.13
Wuhan Jinzhong	139,646,6 22.11	32,678,29 7.29	32,678,29 7.29	2,546,548 .58	91,168,66 6.30	4,097,903 .61	4,097,903 .61	64,759,58 0.09
Engineering Technology Co., Ltd. Beijing Huashi	1,030,188 .65	7,681,985 .38	7,681,985 .38	2,611,614 .58	12,762,24 2.32	103,271.4 6	103,271.4 6	339,650.6 8
United Energy Technology Development Co., Ltd. Fujian Sanju Fuda Fertilizer	4,767,920 .72	29,711.72 29,711.72		541,942.8 8	4,202,703 .18	1,946,435 .19	1,946,435 .19	675,421.2 0
Catalyst National Engineering Research Center Co., Ltd. Sichuan Xinda			2,432,045		- 54,962,61			

New Energy Technology	.48 131,020.3	99.14	131,020.3 99.14	8,927,849 .39	6.83 136,404.4	80.49	136,404.4 80.49	3,836,421 .03
Co., Ltd. Shandong Sanju	643,564,6 19.18	13,343,97 4.76	13,343,97 4.76	11,056,64 5.69	72,759,28 4.70	126,160,1 06.28	126,160,1 06.28	162,537,3 94.63
Bioenergy Co., Ltd. Inner Mongolia Meifang Coal Coking Co., Ltd.	4,957,665 .960.97	273,882.4 63.68	273,882.4 63.68	96,821,53 5.21				

other instructions:

The company acquired Meifang Coking Chemical at the end of 2021, and its 2021 profit statement will not be incorporated into the company's consolidated statements.

(4) Significant restrictions on using enterprise group assets and repaying enterprise group debts

none

(5) Financial support or other support provided to structured entities included in the scope of consolidated financial statements

none

other instructions:

none

2. The owner's equity share in the subsidiary has changed and the transaction of the subsidiary is still controlled

(1) Explanation on changes in the share of owner's equity in subsidiaries

none

(2) The impact of the transaction on the minority shareholders' equity and the owner's equity attributable to the parent company

unit: yuan

Purchase cost/disposition consideration	
--cash	
-- Fair value of non-cash assets	
Total purchase cost/disposal consideration	
Less: share of net assets of subsidiaries calculated based on the proportion of equity acquired/disposed of	
difference	
Including: adjusted capital reserve	
Adjusted surplus reserve	
Adjust retained earnings	

other instructions:

3. Interests in joint venture arrangements or joint ventures

(1) Important joint ventures or associates

Joint venture or associate company name	Main place of business	registration	business nature	Shareholding ratio		Accounting treatment for investments in joint ventures or associates
				direct	indirect	
Beijing Sanju Yujin Technology Development Co.,	Mentougou District, Beijing	Mentougou District, Beijing	Technology development transfer and promotion	20.00%		equity law
Ltd. Jutal Offshore Oil Service Co., Ltd. Inner	Shenzhen	Manufacturing of oil and gas	facilities in the Cayman Islands		32.38%	Equity method
Mongolia Jiajing Magnesium Industry Co., Ltd.	Wuda District, Wuhai City, Inner Mongolia	Wuda District, Wuhai City, Inner Mongolia	Chemical product sales		27.72%	Equity method

Explanation for the shareholding ratio in joint ventures or associates that is different from the voting rights ratio:

none

Basis for holding less than 20% of the voting rights but having a significant influence, or holding 20% or more of the voting rights but not having a significant influence:

none

(2) Main financial information of important joint ventures

(3) Main financial information of important associates

unit: yuan

	Balance at the end of the period/Amount incurred			Balance at the beginning of the period/Amount		
	Jutal Offshore Oil Service Co., Ltd.	Inner Mongolia Jiajing Magnesium Industry Co., Ltd.	in the current period Beijing Sanju Yujin Technology Development Co., Ltd.	Jutal Offshore Oil Service Co., Ltd.	Inner Mongolia Jiajing Magnesium Industry Co., Ltd.	incurred in the previous period Beijing Sanju Yujin Technology Development Co., Ltd.
current assets	1,621,558.00 0.00	213,357,333. 04	2,280,180.15	2,137,380.00 0.00	304,801,006. 13	2,162,104.78
Non-current assets	1,557,904.00 0.00	1,610,896.95 0.01	907,500,584. 84	1,736,590.00 0.00	1,731,534.65 9.67	851,918,667. 42
total assets	3,179,462.00 0.00	1,824,254,28 3.05	909,780,764. 99	3,873,970.00 0.00	2,036,335,66 5.80	854,080,772. 20
Current liabilities	1,089,954.00 0.00	336,025,668. 49	627,257,964. 28	1,797,047.00 0.00	399,761,486. 82	569,023,909. 33
Non-current liabilities	342,261,000. 00	46,039,876.3 8		271,456,000. 00	51,039,876.3 8	
Total Liabilities	1,432,215.00 0.00	382,065,544. 87	627,257,964. 28	2,068,503.00 0.00	450,801,363. 20	569,023,909. 33
minority interests						
Equity attributable to shareholders of the parent company	1,747,247.00 0.00	1,442,188.73 8.18	282,522,800. 71	1,805,467.00 0.00	1,585,534.30 2.60	285,056,862. 87
Share of net assets calculated by shareholding ratio	565,758,578. 60	399,774,718. 22	56,504,560.1 5	688,966,207. 20	439,510,108. 68	57,011,372.5 8
Adjustments						
--Goodwill--						
Unrealized profit from internal transactions						

--other	53,601,063.4 ₉	15,795,582.6 ₄	964,911.21	362,161.00	15,795,582.6 ₄	964,911.21
The fair value of equity investments in associates for which there is a public quotation for the book value of equity investments in associates	619,359,642.09	383,979,135.58	57,469,471.36	689,328,368.20	423,714,526.04	57,976,283.79
operating income	1,750,927,000.00	7,108,455.36		3,981,612,000.00		
net profit	208,234,000.00	143,345,564.42	2,534,062.16	11,024,000.00		2,498,951.30
Net profit from discontinued operations						
Other comprehensive income	27,450,000.00					
Total comprehensive income	180,784,000.00	143,345,564.42	2,534,062.16	11,024,000.00		2,498,951.30
Dividends received from associates during the year				117,474,685.80		

other instructions:

(4) Summary financial information of unimportant joint ventures and associates

unit: yuan

	Closing balance/Amount incurred in the current period	Opening balance/amount incurred in the previous period
Joint ventures:		
The total of the following items calculated according to the shareholding ratio		
Associated Enterprises:		
The total of the following items calculated according to the shareholding ratio		

other instructions:

(5) Explanation of significant restrictions on the ability of joint ventures or associates to transfer funds to the company

none

(6) Excess losses incurred by joint ventures or associates

unit: yuan

Accumulated unrecognized losses accumulated in the previous period in the name of joint ventures or associates	Unrecognized losses in the current period (or shared net profits in the current period)	Accumulated unrecognized losses at the end of the period
--	---	--

other instructions:

(7) Unconfirmed commitments related to investment in joint ventures

none

(8) Contingent liabilities related to joint venture or joint venture investment

none

4. Important joint operations

Joint business name Principal place of business	Registration	business nature	Shareholding ratio / share enjoyed	
			direct	indirect

Explanation for the shareholding ratio or the share enjoyed in the joint operation is different from the voting right ratio:

If the joint operation is a separate entity, the basis for classification as a joint operation:

other instructions:

5. Interests in structured entities not included in the scope of consolidated financial statements

Relevant explanations for structured entities not included in the scope of consolidated financial statements:

none

6. Others

none

X. Risks related to financial instruments

Risk Management Objectives and Policies

The goal of the company's risk management is to achieve an appropriate balance between risks and benefits, and to minimize the negative impact of risks on the company's operating performance

level to maximize the interests of shareholders and other equity investors. Based on this risk management objective, the basic strategy of the company's risk management is to determine and analyze the company's

To establish a proper risk tolerance bottom line and carry out risk management, and monitor various risks in a timely and reliable manner, so as to control the risks within the limits.

within the range.

1. Market risk

(1) Foreign exchange risk

Foreign exchange risk refers to the risk of loss due to changes in exchange rates. The company's exposure to foreign exchange risk is mainly related to foreign currencies such as US dollars, Hong Kong dollars, and Singapore dollars.

Some subsidiaries of SJ ENVIRONMENTAL CORP, Sanju Environmental Protection (Hong Kong) Co., Ltd., and HAIXIN ENERGY TECHNOLOGY INTERNATIONAL PTE. LTD. have some businesses settled in foreign currencies such as US dollars,

Hong Kong dollars, and Singapore dollars. Other major business activities of the company are denominated in RMB settlement. December 2022

On March 31, except that the balance of assets or liabilities mentioned in the table below is in US dollars, Hong Kong dollars, and Singapore dollars, the company's assets and liabilities are all in RMB. The balance of the foreign currency

Foreign exchange risks arising from assets and liabilities may have an impact on the company's operating performance.

unit: yuan

project	Year-end	Beginning of the year
Monetary funds of		
which: US dollars, Hong	163,437,033.35	59,991,371.00
Kong	399,854.97	167,450.64
dollars, and	530,045.58	
Singapore dollars Total	164,366,933.90	60,158,821.64
Accounts		
receivable of which:	43,972,798.06	38,385,307.79
Total in	238,573,338.27	
USD and HKD	282,546,136.33	38,385,307.79
Prepayments		
including: USD,	3,265,100.66	48,281,020.79
HKD,	82,606,237.80	
SGD, total	18,366.78	
Other	85,889,705.24	48,281,020.79
receivables, of		
which: USD,	14,865,227.20	
HKD,	42,136,883.29	17,210.48
SGD, total	260,580.35	
	57,262,690.84	17,210.48
Inventory of which:	94,873,507.17	106,034,052.73
USD	742,393,904.98	255,198,803.71
and HKD	837,267,412.15	361,232,856.44
total Long-term equity		
investment of		
which:	629,902,371.49	758,742,242.69
USD and HKD total	629,902,371.49	758,742,242.69
Fixed assets		
including: USD,	142,012.51	61,368.22
HKD,	61,085.41	55,908.91
SGD	126,668.74	
	329,766.66	117,277.13
Accumulated		
depreciation of	28,066.01	52,498.34
which:	56,813.25	42,661.29
USD, HKD,	3,518.60	
SGD Total	88,397.86	95,159.63
Accounts		
payable of which:	5,753,408.77	27,298,647.31
Total	336,439,727.05	
in USD and HKD	342,193,135.82	27,298,647.31

Contract Liabilities		
Including: USD, Hong		23,703,835.68
Kong	220,247,256.27	
Dollars Total	220,247,256.27	23,703,835.68
Other Payables Of		
which: USD, Hong		
Kong	369,510,556.38	367,315.21
Dollars, Singapore	2,101,421.76	
Dollars Total	371,611,978.14	367,315.21
Taxes payable		
including: US dollars	102,862.96	
and		6,745,200.00
Hong Kong dollars	102,862.96	6,745,200.00

2. Credit risk

On December 31, 2022, the largest credit risk exposure that may cause the company's financial losses mainly comes from the other party's failure to perform its obligations, resulting in the company's losses arising from the company's financial assets and financial guarantees undertaken by the company, specifically including: the book value of financial assets recognized in the consolidated balance sheet; For financial instruments measured at fair value, the book value reflects its risk exposure, but not the maximum risk exposure, and its maximum risk exposure will change with future fair value. changes in value. The company has adopted necessary policies to ensure that all sales customers have good credit records and there is no major credit concentration risk.

The company's working capital is deposited in banks with higher credit ratings, so the credit risk of working capital is relatively low.

3. Liquidity risk

Liquidity risk refers to the risk of shortage of funds when an enterprise fulfills its obligations for settlement by delivery of cash or other financial assets. Company policy It is to ensure that there is sufficient cash to pay off debts as they come due. Liquidity risk is centrally controlled by the Company's financial department. By monitoring the balance of cash, the financial department can The marketable securities that can be realized at any time and the rolling forecast of cash flow in the next 12 months ensure that the company has sufficient funds to repay debts under all reasonable forecasts. service.

XI. Disclosure of fair value

1. Ending fair value of assets and liabilities measured at fair value

unit: yuan

project	Fair value at the end of the period			
	The first level of fair value measurement	The second level of fair value measurement	The third level of fair value measurement	total
1. Continuous fair value measurement				
2. Non-continuous fair value measurement				

2. The basis for determining the market price of continuous and non-continuous first-level fair value measurement items

none

3. Continuous and non-continuous second-level fair value measurement items, valuation techniques used and qualitative and quantitative information on important parameters

none

4. Continuous and non-continuous third-level fair value measurement items, valuation techniques used and qualitative and quantitative information on important parameters

none

5. Continuous third-level fair value measurement items, adjustment information between book value at the beginning and end of the period and sensitivity analysis of unobservable parameters

none

6. For continuous fair value measurement items, in the current period, if there is a switch between different levels, the reason for the switch and the policy for determining the time point of the switch

none

7. Changes in valuation technology during the period and reasons for the changes

none

8. Fair value of financial assets and financial liabilities not measured at fair value

none

9. Others

none

12. Related parties and related transactions

1. The parent company of the company

parent company name	Registration	business nature	registered capital	The parent company's shareholding ratio in the enterprise	Proportion of voting rights of the parent company to the enterprise
Beijing Haixinzhi Low Carbon Technology Development Co., Ltd.	Haiding district, Beijing	Energy-saving technology promotion, technical services; economic and trade consulting, etc.	80 million yuan	29.48%	29.48%

Explanation of the parent company of the enterprise

The controlling shareholder of the company is Beijing Haixinzhi Low Carbon Technology Development Co., Ltd., which was established on September 13, 2021 with a registered capital of 80 million yuan. The legal representative is Wang Teng, the main business is energy-saving technology promotion, technical services; economic and trade consulting; enterprise management; enterprise management consulting. (Market entities independently choose business items in accordance with the law For projects subject to approval according to law, business activities shall be carried out in accordance with the approved content after approval by relevant departments; business activities of projects prohibited and restricted by the industrial policies of the state and this city are not allowed.) Hai Xinzhi currently holds 692,632,562 shares of the company, accounting for 29.48% of the company's total share capital. Sea State Investment Group Holds 100% shares of Haixinzhi and is the controlling shareholder of Haixinzhi.

The ultimate controller of the enterprise is the State-owned Assets Supervision and Administration Commission of the People's Government of Haidian District, Beijing.

other instructions:

none

2. The company's subsidiaries

For the details of the subsidiaries of the company, please refer to Note IX. 1. Equity in subsidiaries.

3. The company's joint ventures and associates

For details of important joint ventures or joint ventures of the company, please refer to Note IX. 3. Interests in joint venture arrangements or joint ventures.

The situation of other joint ventures or associates that had related party transactions with the company in the current period, or had balances with the company in the previous period is as follows:

Joint venture or associate company name	Relationship with the company
Inner Mongolia Jiajing Magnesium Industry Co., Ltd.	Company Associates

other instructions:

none

4. Other related parties

Name of other related parties	Relationship between other related parties and the company
Beijing Haidian District State-owned Assets Investment Management Co., Ltd.	An indirect controlling shareholder of a legal person
Beijing Haidian District State-owned Assets Investment Group Co., Ltd. Heilongjiang	company holding more than 5% of the company's shares, an enterprise company that holds 100%
Longyou Petrochemical Co., Ltd. Hebi Huashi United Energy Technology	shares of Hai Xinzhi and Hai Guotou controlled by the
Co., Ltd. Beijing Haidian Technology Development Co., Ltd.	same actual controller The joint
Tangshan Caofeidian Haiguo Jingtai Energy Co., Ltd.	stock company of the enterprise company controlled by the
Inner Mongolia Jushi Energy Co., Ltd. Beijing Haixinyu Urban Renewal	same actual controller, Mr. Zhang Pengcheng, the
Construction Development Co., Ltd. Fuda Zijin	chairman of the company,
Hydrogen Energy Technology Co., Ltd.	serves as its director

other instructions:

5. Related transactions

(1) Affiliated transactions of purchase and sale of goods, provision and acceptance of services

Purchasing goods/accepting labor service form

unit: yuan

Related party	Contents of related party transactions	Approved transaction amount for current period	Whether the transaction limit is exceeded	Amount incurred in the previous period
Hebi Huashi United Energy Technology Co., Ltd. Inner	Purchase payment			33,959,803.87
Mongolia Jushi Energy Co., Ltd. Inner Mongolia	Purchase payment	7,945,951.75	7,945,951.75 no	
Jushi Energy Co., Ltd.	accept labor	9,166,000.00	9,166,000.00 No	

Sales of goods/provision of labor services

unit: yuan

Related party	Related transaction content	Amount incurred in the current period	Amount incurred in the previous period
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Hebi Huashi United Energy Technology Co., Ltd. Hebi	Sales of goods	665,486.73	3,250,978.61
Huashi United Energy Technology Co., Ltd.	Technical Services	566,037.74	1,547,169.77
Heilongjiang Longyou Petrochemical Co., Ltd. Inner Mongolia Jiaping	project and sales		2,729,956.11
Magnesium Industry Co., Ltd. sells products Inner Mongolia Jushi Energy		1,083,446.97	
Co., Ltd. sells products		88,998,670.54	

Explanation of affiliated transactions of purchase and sale of goods, provision and acceptance of services

(2) Related entrusted management/contracting and entrusted management/contracting

The company's entrusted management/contracting situation table:

unit: yuan

Name of entrusting party/ contracting party	Trustee/Contractor Name	Entrusted/contracted asset type	Entrustment/contract start date	Entrustment/Contract Termination Date	Custodial income/ contracting income pricing basis	Custody income/contracting income confirmed in the current period
--	----------------------------	------------------------------------	------------------------------------	--	--	---

Description of related trusteeship/contracting

The company's entrusted management/outsourcing situation table:

unit: yuan

Name of entrusting party/ contracting party	Trustee/Contractor Name	Entrusted/outsourced asset type	Entrustment/package start date	Consignment/Outsourcing Termination Date	Pricing basis for hosting fee/outsourcing fee	Custody fee/outsourcing fee confirmed in this period
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Association management/outsourcing situation description

(3) Related leases

The Company as lessor:

unit: yuan

lessee name	Types of Leased Assets	Lease income recognized in the current period	Lease income recognized in the previous period
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The company as lessee:

unit: yuan

lessor name	Types of Leased Assets	Simplified treatment of rental expenses for short-term leases and leases of low- value assets (if applicable)		Variable lease payments not included in the measurement of the lease liability (if applicable)		rent paid		Interest expense on lease liability assumed		Increased right-of-use assets	
		Amount incurred in the current period	Amount incurred in the previous period	Amount incurred in the current period	Amount incurred in the previous period	Amount incurred in the current period	Amount incurred in the previous period	Amount incurred in the current period	Amount incurred in the previous period	Amount incurred in the current period	Amount incurred in the previous period
Beijing Haidian Science and Technology Development	building	10,298 812.2 9	18,059 680.7 1			7,000, 000.00	27,851 328.0 0				
Co., Ltd. Beijing Haixin Yucheng	building	3,835, 994.88				4,181, 234.40					

City Update Construction Development Co.,											
Ltd. Inner Mongolia Jiajing	building	4,403, 669.76				3,200, 000.00					
Magnesium Industry Co., Ltd. Inner Mongolia Jushi Energy Co., Ltd.	building	605,50 4.59				660,00 0.00					

Description of related leases

(4) Related guarantees

The company as a guarantor

unit: yuan

guaranteed party	Guarantee amount	Guarantee start date	Guarantee Expiry Date	Whether the guarantee has been fulfilled
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The company as the guaranteed party

unit: yuan

guarantor	Guarantee amount	Guarantee start date	Guarantee Expiry Date	Whether the guarantee has been fulfilled
Beijing Haidian Science and Technology	50,000,000.00	January 07, 2021	January 06, 2022 is	
Development Co., Ltd. Beijing Haidian Science	50,000,000.00	February 04, 2021	February 03, 2022 is	
and Technology Development Co., Ltd. Beijing	49,000,000.00	February 22, 2021	February 21, 2022 is	
Haidian Science and Technology Development Co., Ltd. Beijing Haidian	50,000,000.00	January 12, 2022	January 11, 2023 No	
District State-owned Assets Investment Group Co., Ltd. Beijing Haidian	50,000,000.00	January 27, 2022	January 26, 2023 No	
District State-owned Assets Investment Group Co., Ltd. Beijing Haidian	49,000,000.00	February 23, 2022	February 22, 2023 No	
District State-owned Assets Investment Group Co., Ltd. Beijing Haidian	333,000,000.00	April 30, 2019	April 30, 2022 is	
District State-owned Assets Investment Group Co., Ltd. Beijing Haidian	200,000,000.00	December 23, 2019	June 24, 2023 No	
District State-owned Assets Investment Group Co., Ltd. Beijing Haidian	11,073,000.00	October 23, 2020	October 22, 2023 No	
District State-owned Assets Investment Group Co., Ltd. Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	110,000,000.00	October 27, 2020	October 27, 2023 No	
Beijing Haidian Science and Technology Development Co., Ltd.	14,400,000.00	August 27, 2021	February 27, 2025 No	
Assets Investment Group Co., Ltd. Beijing Haidian District State-owned	14,099,735.62	September 22, 2021	March 22, 2025 No	
Assets Investment Group Co., Ltd. Beijing Haidian District State-owned	14,099,735.62	November 04, 2021	May 04, 2025 No	

Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	14,400,000.00	December 08, 2021	June 08, 2025	No
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	14,099,735.62	January 12, 2022	July 12, 2025	No
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	7,200,000.00	April 26, 2022	October 26, 2025	No
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	2,400,000.00	August 22, 2022	February 22, 2026	No
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	450,000,000.00	May 31, 2022	May 01, 2024	No
Beijing Haidian District State-owned Assets Investment Group Co., Ltd., Heilongjiang Haiguo Longyou Petrochemical Co., Ltd. Beijing	500,000,000.00	March 4, 2022	March 04, 2024	No
Haidian District State-owned Assets Investment Group Co., Ltd. Beijing	200,000,000.00	May 24, 2022	May 25, 2027	No
Haidian District State-owned Assets Investment Group Co., Ltd., Beijing Xintai Ronghui Technology Co., Ltd., Beijing Haixinzhi Low Carbon Technology Development Co., Ltd.	514,262,532.98	December 29, 2021	December 29, 2024	No
Beijing Haidian District State-owned Assets Investment Group Co., Ltd., Beijing Xintai Ronghui Technology Co., Ltd., Beijing Haixinzhi Low Carbon Technology Development Co., Ltd. Beijing	85,857,661.36	January 28, 2022	January 28, 2025	No
Development Co., Ltd. Beijing Haidian District State-owned Assets Investment Group Co., Ltd., Beijing Xintai Ronghui Technology Co., Ltd., Beijing Haixinzhi Low Carbon Technology Development Co., Ltd.	93,735,315.59	March 29, 2022	March 29, 2025	No
Technology Development Co., Ltd. Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	250,000,000.00	November 03, 2022	November 03, 2023	No

Description of related guarantees

(5) Fund borrowing with related parties

unit: yuan

Related party	Loan amount	start date	expiry date	illustrate
Separation into Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	157,000,000.00	March 07, 2022	May 14, 2024	Annual interest rate 6.8%
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	49,000,000.00	March 11, 2022	May 14, 2024	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	10,000,000.00	March 18, 2022	May 14, 2024	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	36,000,000.00	March 24, 2022	May 14, 2024	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd. limited company	30,000,000.00	April 1, 2022	May 14, 2024	6.8% annual interest rate

Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	28,000,000.00	April 14, 2022	May 14, 2024	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	140,000,000.00	April 18, 2022	May 14, 2024	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	8,000,000.00	June 9, 2022	May 14, 2024	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	129,000,000.00	June 14, 2022	May 14, 2024	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	20,000,000.00	June 20, 2022	May 14, 2024	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	10,000,000.00	June 24, 2022	May 14, 2024	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	19,000,000.00	June 28, 2022	May 14, 2024	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	50,000,000.00	January 05, 2022	August 13, 2022	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	50,000,000.00	January 20, 2022	August 13, 2022	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	10,200,000.00	January 27, 2022	August 13, 2022	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	20,000,000.00	January 28, 2022	August 13, 2022	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	18,000,000.00	February 09, 2022	August 13, 2022	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	49,000,000.00	February 18, 2022	August 13, 2022	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	216,000,000.00	April 18, 2022	March 01, 2023	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	10,000,000.00	April 27, 2022	March 01, 2023	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	200,000,000.00	April 28, 2022	March 01, 2023	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	15,000,000.00	May 13, 2022	March 01, 2023	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	55,000,000.00	May 13, 2022	March 01, 2023	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	96,000,000.00	April 26, 2022	March 01, 2023	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	66,000,000.00	June 6, 2022	March 01, 2023	6.8% annual interest rate
Co., Ltd. Beijing Haidian District State-owned Assets Investment	21,000,000.00	June 9, 2022	March 01, 2023	6.8% annual interest rate
Group Co., Ltd. Beijing Haidian District State-owned Assets	21,000,000.00	June 14, 2022	March 01, 2023	6.8% annual interest rate
Investment Group Co., Ltd. Beijing Haidian District State-owned Assets	60,000,000.00	June 17, 2022	March 01, 2023	6.8% annual interest rate
Investment Group Co., Ltd. Beijing Haidian District State-owned Assets	31,000,000.00	June 28, 2022	March 01, 2023	6.8% annual interest rate
Investment Group Co., Ltd. Beijing Haidian District State-owned Assets	20,000,000.00	June 28, 2022	March 01, 2023	6.8% annual interest rate
Investment Group Co., Ltd. Co., Ltd. Beijing Haidian District State-owned	63,000,000.00	July 04, 2022	March 01, 2023	6.8% annual interest rate
Assets Investment Group Co., Ltd. Beijing Haidian District State-owned	40,000,000.00	July 11, 2022	March 01, 2023	6.8% annual interest rate
Assets Investment Group Co., Ltd. Beijing Haidian District State-owned	40,000,000.00	July 19, 2022	March 01, 2023	6.8% annual interest rate
Assets Investment Group Co., Ltd. Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	34,000,000.00	July 26, 2022	March 1, 2023	Annual interest rate 6.8%

Beijing Haidian District State-owned				
Assets Investment Group Co., Ltd. Beijing Haidian District State-owned	10,000,000.00 July 27, 2022		March 01, 2023	6.8% annual interest rate
Assets Investment Group Co., Ltd. Beijing Haidian District State-owned	55,000,000.00 July 29, 2022		March 01, 2024	6.8% annual interest rate
Assets Investment Group Co., Ltd. Beijing Haidian District State-owned	60,000,000.00 August 1, 2022		March 01, 2023	6.8% annual interest rate
Assets Investment Group Co., Ltd. Beijing Haidian District State-owned	30,000,000.00 August 09, 2022		March 01, 2024	6.8% annual interest rate
Assets Investment Group Co., Ltd. Assets Investment Group Co., Ltd.	20,000,000.00 August 17, 2022		March 01, 2024	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	10,000,000.00 August 19, 2022		March 01, 2024	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	30,000,000.00 August 22, 2022		March 01, 2024	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	11,000,000.00 August 25, 2022		March 01, 2023	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	30,000,000.00 September 02, 2022		March 01, 2024	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	100,000,000.00 September 02, 2022		March 01, 2023	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	66,000,000.00 September 05, 2022		March 01, 2023	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	55,000,000.00 September 9, 2022		March 01, 2024	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	15,000,000.00 September 20, 2022		March 01, 2023	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	6,000,000.00 September 21, 2022		March 01, 2023	6.8% annual interest rate
Beijing Haidian District State-owned Asset Investment Group Co., Ltd.	5,710,000.00 September 30, 2022		March 01, 2024	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	30,000,000.00 October 10, 2022		March 01, 2023	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	39,840,000.00 October 26, 2022		March 01, 2024	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	1,160,000.00 October 26, 2022		March 01, 2024	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	10,000,000.00 October 27, 2022		March 01, 2023	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	60,000,000.00 November 01, 2022		March 01, 2023	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	3,070,000.00 November 10, 2022		March 01, 2024	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	3,000,000.00 November 24, 2022		March 01, 2024	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	11,000,000.00 November 25, 2022		March 01, 2023	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	66,000,000.00 December 02, 2022		March 01, 2023	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	14,900,000.00 December 20, 2022		March 01, 2023	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	6,000,000.00 December 21, 2022		March 01, 2023	6.8% annual interest rate
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	51,000,000.00 December 29, 2022		March 01, 2023	6.8% annual interest rate

(6) Asset transfer and debt restructuring of related parties

unit: yuan

Related party	Related transaction content	Amount incurred in the current period	Amount incurred in the previous period
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(7) Remuneration of key management personnel

unit: yuan

	Amount incurred in the current period	Amount incurred in the previous period
Compensation of key project managers	9,573,664.26	7,253,402.03

(8) Other connected transactions

Related	Related transaction content	Amount incurred in the current period	Amount incurred in the previous period
parties Beijing Haidian District State-owned Assets Investment and Operation	interest	53,526,546.24	64,127,374.20
Co., Ltd. Beijing Haidian District State-owned Assets Investment and Operation Co., Ltd.	guarantee fee		94,339.62
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	interest	62,272,536.44	22,775,482.31
Beijing Haidian District State-owned Assets Investment Group Co., Ltd.	guarantee fee	10,152,369.05	2,110,500.46

6. Receivables and payables of related parties

(1) Receivable items

unit: yuan

project name	Related party	Ending balance		Opening Balance	
		Book balance	Bad debt provision	Book balance	Bad debt provision
accounts receivable	Heilongjiang Longyou Petrochemical Co., Ltd. Hebi	7,882,540.40	1,747,792.04	7,882,540.40	634,011.52
accounts receivable	Huashi United Energy Technology Co., Ltd.	15,292,325.84	3,919,006.56	14,742,500.84	1,697,819.17
accounts receivable	Inner Mongolia Jiajing Magnesium	2,551,017.23	576,597.83	1,443,709.22	298,950.05
accounts receivable	Industry Co., Ltd. Inner Mongolia	422,748,789.91	86,360,179.81	409,006,524.83	65,204,900.45
Prepayments	Jushi Energy Co., Ltd. Tangshan Caofeidian			28,600,000.00	
Prepayments	Haiguo Jingtai Energy Co., Ltd. Inner	15,808,807.27		17,185,403.15	
Prepayments	Mongolia Jiajing Magnesium	9,281,364.25		6,286,150.39	
Prepayments	Industry Co., Ltd. Inner Mongolia Jushi Energy Co., Ltd.	183,127.06			
other receivables	Beijing Haixinyu Urban Renewal Construction	20,000.00		20,000.00	
other receivables	Development Co., Ltd. Heilongjiang	1,573,446.00		1,573,446.00	
other receivables	Longyou Petrochemical Co., Ltd. Beijing Haidian Technology Development Co., Ltd. Beijing Haixinyu City	1,090,756.80			

	Update Construction Development Co., Ltd.				
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(2) Payable items

unit: yuan

project name	Related	Closing book balance	Opening book balance
accounts payable	parties Hebi Huashi United Energy Technology Co.,		29,025,505.63
accounts payable	Ltd. Inner Mongolia Jushi Energy Co.,	829,100.00	32,000.00
Other payables	Ltd. Beijing Haidian District State-owned Assets Investment	869,039,819.33	837,301,968.33
Other payables	Management Co., Ltd. Beijing Haidian District State-owned Assets	1,007,161,462.44	477,458,719.59
Other payables	Investment Group Co., Ltd. Beijing Haidian	4,225,705.40	
Other payables	Technology Development Co., Ltd. Heilongjiang Longyou	82,657,253.99	82,657,253.99
contract liabilities	Petrochemical Co., Ltd. Company Hebi Huashi United	827,433.63	
contract liabilities	Energy Technology Co., Ltd. Inner	122,446.40	108,359.65
contract liabilities	Mongolia Jushi Energy Co., Ltd. Fuda Zijin Hydrogen Energy Technology Co., Ltd.	908,962.26	

7. Commitments of related parties

none

8. Others

During the reporting period, the company received 90 million yuan of cooperative operation funds returned by Hebi Huashi.

13. Share payment

1. Overall situation of share-based payment

ÿApplicableÿNot applicable

2. Equity-settled share-based payment

ÿApplicableÿNot applicable

3. Share-based payment settled in cash

ÿApplicableÿNot applicable

4. Modification and termination of share payment

none

5. Others

none

14. Commitments and contingencies

1. Important commitments

Significant commitments at the balance sheet date

2. Contingencies

(1) Important contingencies existing on the balance sheet date

As of the end of the reporting period, the company's other lawsuits that did not meet the disclosure standards for major lawsuits involved an amount of 102.7934 million yuan, and the estimated total liabilities were 98.3594 million yuan.

(2) If the company has no important contingencies that need to be disclosed, it should also be explained

The company has no important contingencies that need to be disclosed.

3. Others

15. Events after the balance sheet date

1. Important non-adjustment items

unit: yuan			
project	content	Impact on Financial Condition and Results of Operations	Reasons for not being able to estimate an impact number

2. Profit distribution

unit: yuan	
Profit or dividend to be distributed	0.00
Profits or dividends announced upon review and approval	0.00
Profit distribution plan	No cash dividends, no bonus shares, and no conversion of capital reserves into share capital.

3. Sales returns

none

4. Description of other events after the balance sheet date

(1) As of the date of approval of this report, the company signed the "Supplementary Agreement to the Property Rights Transaction Contract" with Daqing Yucao, and Daqing Yucao has paid 806.6167 million yuan for the entire equity transfer. The company has received the "Enterprise State-owned Assets Transaction Certificate" issued by the Beijing Stock Exchange regarding the transfer of 100% equity of Sanju Green Energy.

For details, please refer to "About Listing and Transferring 100% Shares of Beijing Sanju Green Energy Technology Co., Ltd., a wholly-owned subsidiary Announcement on the Progress of the Right to Entitlement (Announcement No.: 2023-028).

(2) The company publicly listed on the Beijing Stock Exchange to transfer the equity of the three subsidiaries of Sanju Lvyuan, Sanju Beidahuang and Nanjing Sanju. As of the date of approval of this report, the listed transfer projects of the above three companies have obtained qualified intended transferees. The name of the intended transferee is: Heilongjiang Hongxinglong Nongken Julong Biomass New Material Co., Ltd. For details, please refer to the "Announcement on the Progress of Listed Transfer of Equity in Subsidiaries" (Announcement No.: 2023-031). (3) The 43rd meeting of the fifth board of directors held by the company on March 17, 2023 reviewed and

approved the "Proposal on Adjusting the Appraisal Value and Listing Price of the Shareholding Subsidiary Beijing Sanju Yujin Technology Development Co., Ltd.", according to the review opinions of the State-owned Assets Supervision and Administration Commission of the Beijing Municipal People's Government on Sanju Yujin's evaluation report, and with reference to the cost-profit margins of 49 domestic mainstream real estate development companies, it is agreed to adjust the construction-in-progress subjects of Sanju Yujin. After the adjustment, the appraised value of Sanju Yujin's total assets increased from RMB 1,139,562,400 to RMB 1,192,688,400, the appraised value of net assets from RMB 553,202,000 to RMB 606,328,000, and the appraised value of liabilities remained unchanged. According to the above adjustment results, it is agreed to determine that the company's first publicly disclosed listing price on the Beijing Equity Exchange is not less than RMB 121,265,600. At the same time, the board of directors agreed to authorize the company's management to: confirm the specific agreement content, sign relevant agreements and transaction documents, and handle equity transfer procedures, etc.; In accordance with the "Measures for the Supervision and Administration of State-owned Assets Transactions of Enterprises" and other relevant regulations on the disposal of state-owned assets of enterprises, the base price for listing shall be re-determined at no less than 90% of the base price of the first disclosed transfer and the listing shall continue. As of the date of approval of this report, the Sanju Yujin equity transfer project is being listed on the Beijing Equity Exchange.

(4) On March 14, 2023, American Coking received a letter from Wuda District "Reminder on Accelerating the Elimination and Shutdown of Coking Enterprises For details, please refer to the "Progress Announcement on Receipt of the Document of the Office of the Leading Group for the Restructuring and Upgrading of Coking Industry in Wuda District" (Announcement No.: 2023-022). The company has once again asked the original shareholders to pay attention to the progress of the U.S. coking project by the Wuda District Government, and has done a good job in accordance with the "Beijing Sanju Environmental Protection New Materials Co., Ltd. Preparations for fulfilling the repurchase commitment as stipulated in Article 3, Clause 7 of the Transfer Agreement. As of the date of approval of this report, the relevant matters have not affected the production and operation of Meifang Coking and its upstream and downstream enterprises, and Meifang Coking and its upstream and downstream enterprises have carried out production and operation activities according to the established plan. At the same time, American Coking has obtained a newly renewed "Safety Production License".

(5) On November 30, 2022, the Ministry of Finance issued the "Notice on Printing and Distributing the Accounting Standards for Business Enterprises Interpretation No. 16" (Cai Kuai [2022] No. 31) (hereinafter referred to as "Interpretation No. Regarding the accounting treatment of the deferred income tax related to the assets and liabilities arising from a single transaction that does not apply to the initial recognition exemption, it will be implemented from January 1, 2023, "Accounting for the income tax impact of dividends related to financial instruments classified as equity instruments by the issuer Treatment" and "Accounting Treatment for Enterprises Changing Cash-settled Share-based Payments to Equity-settled Share-based Payments" will come into force on the date of announcement. According to the requirements of the above documents, the company will implement Interpretation No. 16 from the stipulated date, and make corresponding changes to relevant accounting policies in accordance with the provisions of Interpretation No. 16.

(6) As of the date of approval of this report, some newly added bank accounts of the company and its subsidiaries have been frozen, involving newly added frozen currency funds of RMB 17,083,800, and RMB 145,700 of unfrozen monetary funds.

16. Other important matters

1. Correction of previous accounting errors

(1) Retrospective restatement method

unit: yuan

Contents of accounting error correction	handler	Affected each comparison period report item name	cumulative impact number
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(2) Future applicable law

Contents of accounting error correction	approval process	Reasons for future application
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2. Debt restructuring

none

3. Asset replacement

(1) Non-monetary asset exchange

none

(2) Other asset replacement

none

4. Annuity plan

none

5. Termination of operation

unit: yuan						
project	income	cost	Total profit	Income tax expense	Net profit	Profit from discontinued operations attributable to owners of the parent company

other instructions:

6. Branch information

(1) Determination basis and accounting policies of reporting segments

none

(2) Financial information of reporting segments

unit: yuan			
project		Intersegment elimination	total

(3) If the company has no reportable segment, or if it is unable to disclose the total assets and total liabilities of each reportable segment, the reasons shall be explained.

(4) Other instructions

none

7. Other important transactions and events that affect investors' decision-making

8. Others

XVII. Notes to the main items of the financial statements of the parent company

1. Accounts receivable

(1) Accounts receivable classification disclosure

unit: yuan

category	Ending balance					Opening Balance				
	Book balance		Bad debt provision		Book value	Book balance		Bad debt provision		Book value
	Amount	Proportion	Amount	Accrual ratio		Amount	Proportion	Amount	Accrual ratio	
Accounts receivable for which provision for bad debts is made individually	328,228,687.38	25.61%	328,228,687.38	100.00%		328,600,482.25	26.15%	328,600,482.25	100.00%	
Among them: Accounts receivable with significant single amount and provision for bad debts individually	326,175,518.72	25.45%	326,175,518.72	100.00%		326,547,313.59	25.99%	326,547,313.59	100.00%	
Accounts receivable with insignificant amount but provision for bad debts individually	2,053,168.66	0.16%	2,053,168.66	100.00%		2,053,168.66	0.16%	2,053,168.66	100.00%	
Accounts receivable with provision for bad debts as a group	953,192,582.04	74.39%	312,295,261.99	32.76%	640,897,320.05	928,042,503.81	73.85%	235,464,178.78	25.37%	692,578,325.03
in:										

Payments from related parties	113,526,833.68	8.86%			113,526,833.68	99,062,547.28	7.88%			99,062,547.28
within the scope of consolidation	839,665,748.36	65.53%	312,295,261.99	37.19%	527,370,486.37	828,979,956.53	65.97%	235,464,178.78	28.40%	593,515,777.75
total	1,281,421,269.42	100.00%	640,523,949.37	49.99%	640,897,320.05	1,256,642,986.06	100.00%	564,064,661.03	44.89%	692,578,325.03

Provision for bad debts by single item: 328,228,687.38 yuan

unit: yuan

name	Ending balance			
	Book balance	Bad debt provision	Accrual ratio	Provision reason
Accounts receivable with significant single amount and provision for bad debts	326,175,518.72	326,175,518.72	100.00%	expected to be uncollectible
individually. Accounts receivable with insignificant single amount but provision for bad debts	2,053,168.66	2,053,168.66	100.00%	expected to be uncollectible
	328,228,687.38	328,228,687.38		

individually shall be provisioned for bad debts individually:

unit: yuan

name	Ending balance			
	Book balance	Bad debt provision	Accrual ratio	Provision reason

Provision for bad debts by portfolio: RMB 312,295,261.99

unit: yuan

name	Ending balance		
	Book balance	bad debt provision	Accrual ratio
Total payment for goods or current payment of	113,526,833.68		
related parties within the scope	839,665,748.36	312,295,261.99	37.19%
of consolidation	953,192,582.04	312,295,261.99	

Instructions for determining what this combination is based on:

Withdrawal of accounts receivable according to the combination of payment for goods or current payment:

unit: yuan

name	Ending balance		
	Book balance	bad debt provision	Accrual ratio
Within 1 year (including 1 year)	228,207,563.80	11,410,378.19	5.00%
1 to 2 years	171,761,357.84	17,176,135.78	10.00%
2 to 3 years	126,407,370.42	37,922,211.13	30.00%
3 to 4 years	99,306,257.53	49,653,128.77	50.00%
4 to 5 years	35,699,581.31	17,849,790.66	50.00%
Total over 5	178,283,617.46	178,283,617.46	100.00%
years	839,665,748.36	312,295,261.99	

Provision for bad debts by combination:

unit: yuan

name	Ending balance		
	Book balance	Bad debt provision	Accrual ratio

Instructions for determining what this combination is based on:

If the bad debt provision for accounts receivable is accrued according to the general model of expected credit losses, please refer to the disclosure method of other receivables to disclose the relevant information of bad debt provision:

ApplicableNot applicable

Disclosure by age

unit: yuan	
aging	Book balance
Within 1 year (including 1 year)	299,171,877.70
1 to 2 years	181,761,357.84
2 to 3 years	158,969,890.20
3+ years	641,518,143.68
3 to 4 years	99,306,257.53
4 to 5 years	305,784,188.14
Total over 5	236,427,698.01
years	1,281,421,269.42

(2) Provision for bad debts accrued, recovered or reversed in the current period

Provision for bad debts in this period:

unit: yuan						
category	Opening Balance	Amount of change in the current period				Ending balance
		Provision	withdraw or transfer back	write off	other	
Provision for bad debts of accounts receivable	564,064,661.03	76,459,288.34				640,523,949.37
total	564,064,661.03	76,459,288.34				640,523,949.37

Among them, the recoverable or reversed amount of bad debt provision in the current period is important:

unit: yuan		
company name	Amount withdrawn or reversed	Recovery method

(3) Accounts receivable actually written off in the current period

unit: yuan	
Write-	Write-off amount

off of important accounts receivable in the project:

Unit: Yuan					
company name	Nature of accounts receivable	Write-off amount	Write-off procedures for	write-off reasons	Whether the payment is generated by related transactions

Accounts receivable write-off instructions:

(4) Accounts receivable of the top five ending balances collected by debtors

unit: yuan

company name	Closing balance of accounts receivable	Proportion to the total ending balance of accounts receivable	Closing balance of provision for bad debts
Inner Mongolia Jushi Energy Co., Ltd.	385,729,185.31	30.10%	82,528,983.15
Jingmen Yingde Gas Co., Ltd. Qitaihe	269,979,606.83	21.07%	269,979,606.83
Bosheng Clean Energy Co., Ltd. Jiangsu	81,350,757.32	6.35%	4,067,537.87
Heyou Chemical Co., Ltd. Shandong	48,873,442.95	3.81%	47,675,962.95
Sanju Bioenergy Co., Ltd. Total	45,938,112.60	3.58%	
	831,871,105.01	64.91%	

(5) Accounts receivable derecognized due to transfer of financial assets

(6) The amount of assets and liabilities formed by the transfer of accounts receivable and continued involvement

other instructions:

2. Other receivables

unit: yuan

project	Ending balance	Opening Balance
dividend receivable	237,013,320.31	237,013,320.31
other receivables	3,279,219,094.88	2,867,538,833.41
total	3,516,232,415.19	3,104,552,153.72

(1) Interest receivable

1) Classification of interest receivable

unit: yuan

project	Ending balance	Opening Balance
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2) Important overdue interest

unit: yuan

Borrower	Ending balance	overdue time	Overdue reason	Whether there is impairment and its judgment basis
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other instructions:

3) Provision for bad debts

Applicable/Not applicable

(2) Dividends receivable

1) Classification of dividends receivable

unit: yuan

Total project (or invested unit)	Ending balance	Opening Balance
Beijing Sanju Green Energy Technology	237,013,320.31	237,013,320.31
Co., Ltd.	237,013,320.31	237,013,320.31

2) Important dividends receivable with an aging of more than 1 year

unit: yuan

Project (or invested unit)	Ending balance	aging	Reason for non-recovery	Whether there is impairment and its judgment basis
Total of Beijing Sanju Green Energy Technology	237,013,320.31	2-3 years	not paid yet	no
Co., Ltd.	237,013,320.31			

3) Provision for bad debts

ApplicableNot applicable

other instructions:

(3) Other receivables

1) Classification of other receivables according to the nature of the receivables

unit: yuan

Nature of payment	Closing book balance	Opening book balance
Security deposits, internal reserve funds	17,938,486.45	6,720,259.34
and other funds and	3,283,507,086.83	2,873,225,549.07
other sums	3,301,445,573.28	2,879,945,808.41

2) Provision for bad debts

unit: yuan

Bad debt provision	The first stage	second stage	The third phase	total
	Expected credit losses in the next 12 months	Expected credit losses throughout the duration (no credit impairment occurred)	Lifetime expected credit loss (credit impairment has occurred)	
January 1, 2022 balance	2,034,543.28		10,372,431.72	12,406,975.00
January 1, 2022 balance in current period				
Accrual for this period	2,319,503.40		7,500,000.00	9,819,503.40
December 31, 2022 balance	4,354,046.68		17,872,431.72	22,226,478.40

Changes in the book balance of loss provisions with significant changes in the current period

ApplicableNot applicable

Disclosure by age

unit: yuan

aging	Book balance
Within 1 year (including 1	1,132,040,418.01
year) 1 to 2 years	1,081,724,247.39
2 to 3 years	864,682,631.57
over 3 years	222,998,276.31
3 to 4 years	222,534,398.56
4 to 5 years	193,857.75
5+ years	270,020.00
total	3,301,445,573.28

3) Provision for bad debts accrued, recovered or reversed in the current period

Provision for bad debts in this period:

unit: yuan

category	Opening Balance	Amount of change in the current period				Ending balance
		Provision	withdraw or transfer back	write off	other	
Provision for bad debts of other receivables	12,406,975.00	9,819,503.40				22,226,478.40
total	12,406,975.00	9,819,503.40				22,226,478.40

Among them, the amount of bad debt provision reversed or recovered in the current period is important:

unit: yuan

company name	Reversed or withdrawn amount	Recovery method
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4) Other receivables actually written off in the current period

unit: yuan

project	Write-off amount
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Important write-offs of other receivables:

unit: yuan

Unit name	Nature of other receivables	Write-off amount	Write-off procedures for	write-off reasons	Whether the payment is generated by related transactions
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Instructions for write-off of other receivables:

5) Other receivables of the top five ending balances collected by debtors

unit: yuan

company name	nature of payment	Ending balance	aging	Proportion to the total ending balance of other receivables	Closing balance of provision for bad debts
Beijing Sanju Green Energy Technology Co., Ltd.	Borrowing and interest	788,457,088.67	Within 1 year, 1-2 years	23.88%	
Sichuan Xinda New Energy Technology Co., Ltd.	Borrowing and interest	730,707,429.04	Within 1 year, 1-2 years, 2-3 years, 3-4 years	22.13%	
Shandong Sanju Bioenergy Co., Ltd. Sanju	Borrowing and interest	635,197,625.17	Within 1 year, 1-2 years, 2-3 years	19.24%	
Environmental Protection (Hong Kong) Co., Ltd.	Borrowing and interest	355,424,722.53	Within 1 year	10.77%	
Hebei Brilliance Petrochemical Co., Ltd.	Borrowing and interest	297,710,752.19	Within 1 year, 1-2 years, 2-3 years, 3-4 years	9.02%	
total		2,807,497,617.60		85.04%	

6) Accounts receivable involving government subsidies

unit: yuan

company name	Government subsidy project name	Ending balance	Ending aging	Estimated collection time, amount and basis
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7) Other receivables derecognized due to transfer of financial assets

8) The amount of assets and liabilities formed by transferring other receivables and continuing to be involved

other instructions:

3. Long-term equity investment

unit: yuan

project	Ending balance Beginning balance Book balance Book value of provision for impairment Book value					
	of book balance	Book value of provision for impairment				
Investment in subsidiaries	4,329,758.71 2.80		4,329,758.71 2.80	4,285,958.71 2.80		4,285,958.71 2.80
Investment in associates and joint ventures	57,469,471.3 6		57,469,471.3 6	57,976,283.7 9		57,976,283.7 9
total	4,387,228,18 4.16		4,387,228,18 4.16	4,343,934,99 6.59		4,343,934,99 6.59

(1) Investment in subsidiaries

unit: yuan

Invested unit	Opening balance (book value)	Changes in current period				Ending balance (book value)	Closing balance of provision for impairment
		Additional investment	Decrease investment	Provision for impairment	other		
Beijing Sanju Green Energy	500,361,90 0.00					500,361,90 0.00	
Technology Co., Ltd. Shenyang Sanju Kite	275,000,00 0.00					275,000,00 0.00	
Catalyst Co., Ltd. Suzhou Hengsheng	121,750,00 0.00					121,750,00 0.00	
New Material Co., Ltd. Daqing Sanju Energy	60,000,000 .00					60,000,000 .00	
Purification Co., Ltd. Inner Mongolia Sanju Jiajing	343,613,92 0.00					343,613,92 0.00	
New Energy Co., Ltd. Wuhan	39,241,440 .00					39,241,440 .00	
Jinzhong Engineering	60,000,000 .00					60,000,000 .00	
Technology Co., Ltd. Hebei Huachen Petrochemical Co., Ltd. Company Heilongjiang Sanju Beidahuang Biomass New Material Co., Ltd.	95,000,000 .00					95,000,000 .00	
SJ ENVIRONMEN TAL CORP	136,103,99 2.41					136,103,99 2.41	
Nanjing Sanju Biomass New Material Technology	13,200,000 .00					13,200,000 .00	
Co., Ltd. Sanju Environmental Protection	833,894,04 8.63					833,894,04 8.63	
(Hong Kong) Co., Ltd. Beijing Huashi United Energy	160,000,00 0.00					160,000,00 0.00	
Technology Development Co., Ltd. Hainan Sanju	30,000,000 .00					30,000,000 .00	
Green Energy Research Institute Co., Ltd. Fujian Sanju Fuda Chemical Fertilizer	20,006,301 .29					20,006,301 .29	
Catalyst National Engineering Research Center Co., Ltd. Beijing Sanju Energy Purification Engineering Co., Ltd.	7,513,245. 49					7,513,245. 49	

Beijing Sanju Green Source	19,480,669.75	43,800,000.00				63,280,669.75	
Co., Ltd. Sichuan Xinda New Energy Technology	9,016,315.00					9,016,315.00	
Co., Ltd. Shandong Sanju	385,000,000.00					385,000,000.00	
Bioenergy Co., Ltd. Guangxi Sanju	4,000,000.00					4,000,000.00	
Bioenergy Co., Ltd. Inner Mongolia Meifang Coal Coking Co., Ltd.	1,172,776,880.23					1,172,776,880.23	
total	4,285,958,712.80	43,800,000.00				4,329,758,712.80	

(2) Investment in associates and joint ventures

unit: yuan

investment unit	Opening balance (book value)	Changes in current period								Ending balance (book value)	Closing balance of provision for impairment
		additional investment	reduce investment	Investment gains and losses recognized under the equity method	Adjustments to other comprehensive income	Other equity changes	Declare a cash dividend or profit	Provision for impairment	other		
1. Joint venture 2.											
Associated company											
Beijing Sanju Yujin Technology Development Co., Ltd.	57,976,283.79			506,812.43						57,469,471.36	
Subtotal	57,976,283.79			506,812.43						57,469,471.36	
total	57,976,283.79			506,812.43						57,469,471.36	

(3) Other instructions

4. Operating income and operating costs

unit: yuan

project	Amount incurred in the current period		Amount incurred in the previous period	
	income	cost	income	cost
Main business	315,875,239.52	275,420,251.33	1,121,484,600.95	959,306,142.05
Other business	229,357.80		935,779.81	
Total	316,104,597.32	275,420,251.33	1,122,420,380.76	959,306,142.05

income related information:

unit: yuan

Contract classification	Division 1	Division 2		total
Commodity types				
including:				
Classified by business area				
in:				
market or customer type				
in:				
type of contract				
in:				
Classified according to the time of commodity				
transfer, of which:				
Classified by contract period				
in:				
Classified by sales channel				
in:				
total				

Information related to performance obligations:

none

Information related to the transaction price allocated to the remaining performance obligations:

At the end of the reporting period, the amount of income corresponding to the performance obligations that have been signed but not yet fulfilled or not fully fulfilled is 42,839,004.96 yuan, of which 42,839,004.96 yuan is expected to be recognized in 2023.

other instructions:

none

5. Investment income

unit: yuan

project	Amount incurred in the current period	Amount incurred in the previous period
Long-term equity investment income calculated by equity method	-506,812.43	-499,790.26
Investment income from disposal of long-term equity investment		35,202,600.00
Investment income from other non-current financial assets during the holding		-5,213,692.81
period Investment income from derecognition of financial		-6,693,438.72
assets Total debt	2,414,401.67	
restructuring income	1,907,589.24	22,795,678.21

6. Others

18. Supplementary Information

1. Current non-recurring profit and loss schedule

ÿ Applicable ÿ Not applicable

unit: yuan

project	the amount	The
Gains and losses on disposal of non-current assets	12,763,811.49	explanation is mainly the gains and losses from the disposal of fixed assets and intangible assets.
Government subsidies included in the current profit and loss (except for government subsidies that are closely related to the company's normal business operations, comply with national policies and regulations, and are continuously enjoyed in accordance with certain standards or quantities)	10,261,989.41	It is mainly the government subsidies received in the current period that are directly included in the current profit and loss and the government subsidies that are carried forward through deferred income and included in the current profit and loss.
Fund occupancy fees charged to non-financial enterprises included in current profit and loss	14,951,035.17	Mainly interest income received from non-financial corporations.
Debt restructuring profit and loss	5,402,533.90 is mainly debt	forgiveness income.
Other non-operating income and expenses other than those listed above	-3,313,608.80 is mainly the net	non-operating income and expenditure of the company.
Less: Income Tax Impact Amount	3,071,307.43	
Amount affected by minority interests	862,236.87	
total	36,132,216.87	

Specific circumstances of other profit and loss items that meet the definition of non-recurring profit and loss:

ÿ Applicable ÿ Not applicable

The company does not have other specific circumstances of profit and loss items that meet the definition of non-recurring profit and loss.

Explanation on the definition of non-recurring profit and loss items listed in the "Interpretive Announcement No. 1 on Information Disclosure of Companies Offering Securities to the Public - Non-recurring Profit and Loss" as recurring profit and loss items

ÿ Applicable ÿ Not applicable

2. Return on net assets and earnings per share

Profit during the reporting period	Weighted Average Return on Equity	earnings per share	
		Basic earnings per share (yuan/share)	Diluted earnings per share (yuan/share)
Net profit attributable to ordinary shareholders of the company	-10.66%	-0.3424	-0.3424
Net profit attributable to ordinary shareholders of the company after deducting non-recurring gains and losses	-11.14%	-0.3577	-0.3577

3. Differences in accounting data under domestic and foreign accounting standards

(1) Differences in net profit and net assets in financial reports disclosed in accordance with both international accounting standards and Chinese accounting standards

ÿ Applicable ÿ Not applicable

(2) Differences in net profit and net assets in financial reports disclosed in accordance with foreign accounting standards and Chinese accounting standards

ApplicableNot applicable

(3) Explanation of the reasons for the differences in accounting data under domestic and foreign accounting standards. If the difference is adjusted for data that has been audited by an overseas audit institution, the name of the overseas institution should be indicated

none

4. Others

none